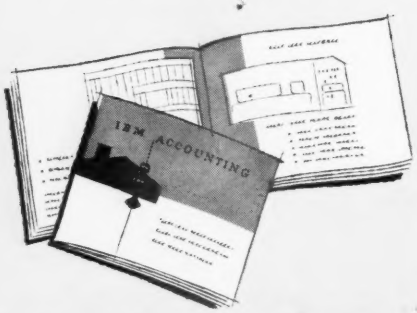
Public Utilities

Volume 58 No. 5 August 30, 1956

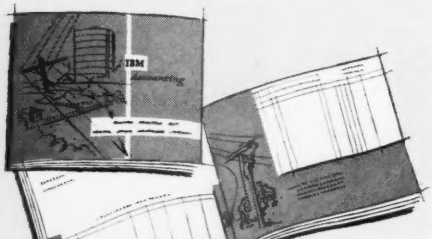
A COST-FREE WAY TO DISCOVER

40 WAYS Public Utilities can get added profits from IBM Accountin

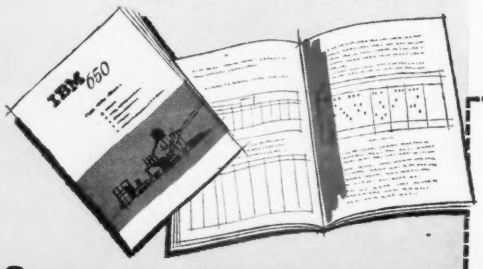
3 NEW GUIDES... FROM IBM



1. Customer Accounting. This 24-page booklet outlines the Customer Accounting procedure from initial application for service to accounts receivable statements.



2. General Accounting. This 44-page booklet is a guide to the IBM punched card documents and the machine reports you can get in such fields as: Property Accounting, Construction Accounting, Payroll (including check preparation and payroll tax reports), Operating Ledgers, and Electronic Data Processing.



3. Electronic Data Processing. This 16-page booklet describes the application of the IBM 650 to Customer Accounting operations, including an IBM 650 schematic program for Bill Calculation and Statistics.

Here are 40 opportunities for improving Public Utility accou through IBM data processing. Several of these applications are a ally by-products of other jobs. Many of them can be accomplishe present equipment . . . in *addition* to your current applications.

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Check list of 40 IBM data processing applications for electric, gas and water utilities

Use this list for a quick review of current applications. If you wa get even more from present equipment, or need further informatio a *particular* application, just check off your area of interest . . . send this list in with your coupon.

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- ___Revenue Accounting
- ___Sales Analyses
- ___Rate Studies
- ___Government Tax Reports
- ___Merchandise Billing
- ___Merchandise Accounting
- ___Customer Accounts Receivable
- ___Accounts Receivable Control
- ___Collection Records
- ___Security Deposit Records
- ___Market Surveys
- ___Meter Control Records
- ___Meter Test Records
- ___Payroll Accounting
- ___Pay Checks and Earnings Records
- ___Pension Records
- ___Wage Studies
- ___Personnel Statistics
- ___Accident Records
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- ___Stores Accounting
- ___Physical Inventory
- ___Purchase Analyses
- ___Fuel Records
- ___Transportation Accounting
- ___Accounts Payable Accounting
- ___Expense Distribution
- ___Budget Reports
- ___Operating Reports
- ___Financial Reports
- ___Functional or Responsibility Accounting
- ___Insurance Records
- ___Engineering Studies
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Public Utilities FORTNIGHTLY

VOLUME 58 AUGUST 30, 1956 NUMBER 5

PUBLIC UTILITIES REPORTS, INC., PUBLISHERS

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Publication Office .....CANDLER BUILDING, BALTIMORE 2, MD.

Advertising Representatives:

New York 6: Robert S. Farley, 111 Broadway, COrtland 7-6638

Cleveland 15: Macintyre-Simpson & Woods, 1900 Euclid Avenue, CHerry 1-1501

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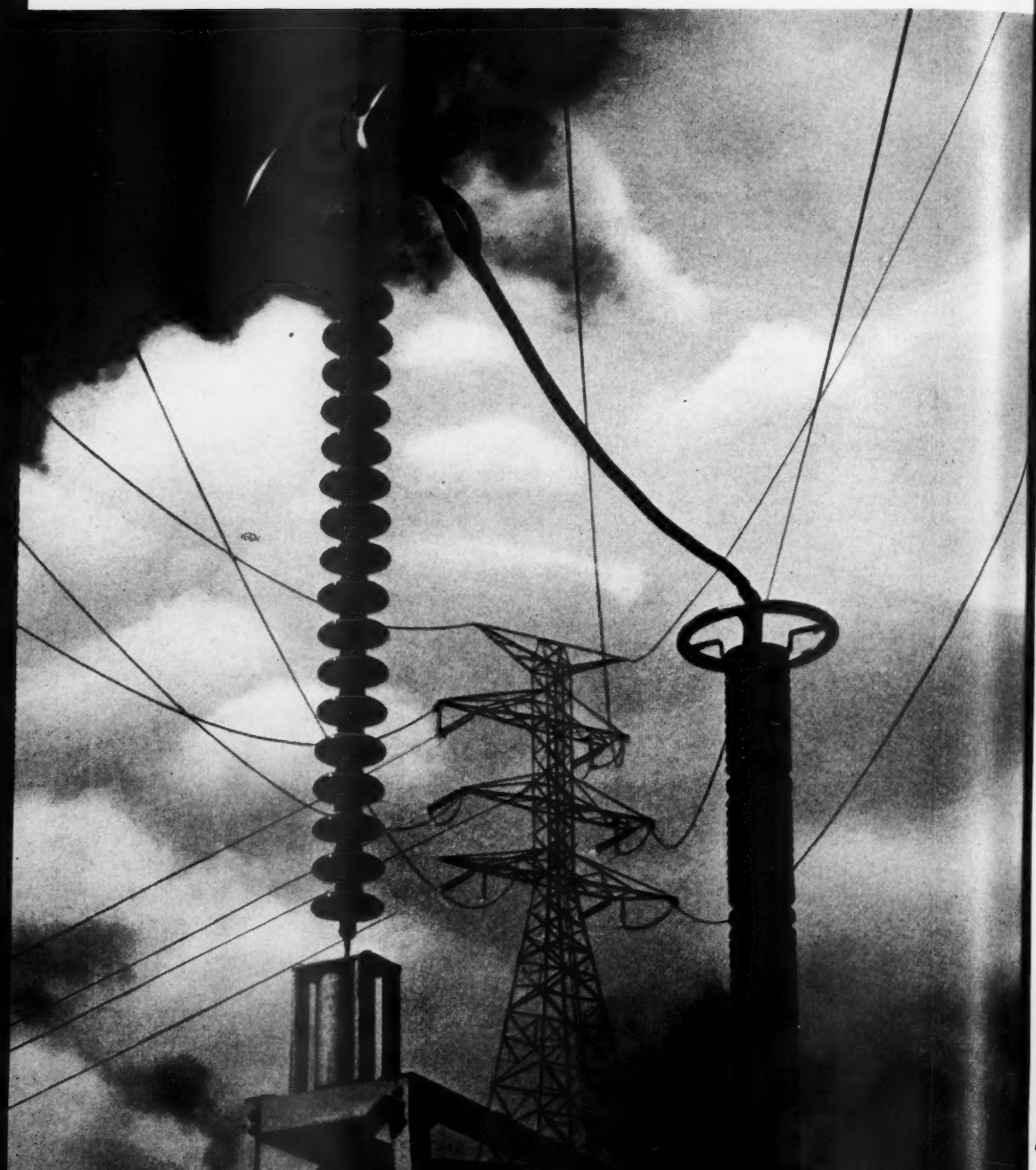
Subscriptions: Address correspondence to PUBLIC UTILITIES FORTNIGHTLY, circulation department, 332 Pennsylvania Building, Washington 4, D. C. Allow one month for change of address.

Single copies $1.00. Annual subscription price (26 issues a year): United States and possessions, $15.00; Pan American countries, $15.00; Canada, $16.00; all other countries, $17.50.

Entered as second-class matter April 29, 1915, under the Act of March 3, 1879, at the Post Office at Baltimore, Md., December 31, 1936.

For the Mass



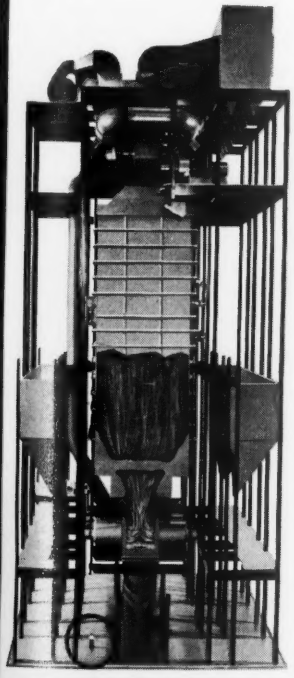
sProduction of Energy

"AMERICAN GAS AND ELECTRIC SYSTEM looks for a higher level of efficiency in the production of electric power than has ever been achieved before."

This firm prediction by Philip Sporn, president of the American Gas and Electric System, refers to the two largest steam-electric generating units in the world, which are to be added to the facilities of AGE.

Second and Third Universal Pressure Units for AGE

Each unit will produce 450,000 kw, enough power to supply the residential need for a city of 4,000,000 people—*more electricity than many complete utility systems.* Steam generators for the two units are of the B&W Universal Pressure type, and will be the second and third to go into commercial service .The first will start producing power at Ohio Power's Philo Plant in the near future.



Cyclone Furnace-fired B&W Universal Pressure Steam Generator to serve 450 MW turbine. Design pressure 4500 psi. Generates 2,900,000 pounds of steam per hour at 3625 psi, 1050 F. There are two stages of reheat to 1050 F. The second unit is similar in design but will be pulverized-coal-fired. Note comparison with six foot man standing at basement level.

Coal the Main Energy Source for Years Ahead

The decision to go ahead with these super-pressure, coal-fired units is based upon the fact that the bulk of our energy, for many years ahead, will come from coal, burned efficiently with economical equipment.

Two Firing Methods Utilized

Each of the B&W Universal Pressure Units will generate 2,900,000 lb of steam per hour. One will be Cyclone Furnace-fired and the other pulverized-coal-fired, to take greatest advantage of the method better suited to fuel and operating conditions in each case.

It takes courage and confidence in their engineering ability for AGE to initiate these world's largest generating units—and this confidence is reinforced by the work of the B&W organization and by previous experience with B&W research, engineering, manufacturing, field development and erection. These capabilities, skills and facilities are the real resources of B&W. For nearly 100 years they have been dedicated to serving the current and future steam-electric power needs of the nation.

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G-8

Pages with the Editors

THE recent political conventions of both major parties have underscored the likelihood that the activity of the government in the power business is going to be made an issue in the forthcoming campaign. Whether it will be a popular or effective issue remains to be seen. Perhaps it will be, in some respects, a "default issue"—meaning something to talk about in the absence of anything else more interesting.

BUT whatever the reason, it is apparent that some politicians at least are determined to talk about it. This may be viewed as an unfortunate development for both the political parties and the electric utility industry. No matter which way the election goes, public utility service, as such, should never become a political football.

WE can all think of much more important issues—probably much more decisive issues. But the American electorate in recent years has been voting more and more along the lines of "package deals." And so whether one or the other major party wins the electoral decision, the winners are always ready, right away, to talk about a "mandate" to go ahead with everything in the winning package.

BENNETT L. SMITH

C. L. COOKE

THE trouble about an issue involving public utility service is that it could quite possibly get into the wrong package or at least the losing package. Its actual fate could be decided on the basis of an overall verdict which would not directly reflect the thoughts and wishes of the majority of the American people regarding the conduct of their public utility services. Perhaps this election may be the end, for a while, of such ill-advised political juggling with such an essential and basically economic matter. Perhaps if such an emotional slogan as the "great giveaway" is talked up and then voted down, the professional politicians will think twice about bothering with it any more. Perhaps. But meanwhile the utility industries, and even the public utility regulators, find themselves in a position where they should never be—caught amidst a general partisan battle for the presidency and the control of Congress.

THE opening article in this issue is one which takes a fresh look at the so-called "give-away issue." Its inspiration was somewhat accidental. The two authors were engaged in the preparation of some material showing comparisons in annual reports to stockholders between taxes and dividends and payrolls. The

Westinghouse CYPAK Clears Away Biggest Obstacle to Spread of Automation

Widespread automation will be Big Load Builder for utilities

In spite of all the talk about automation, industry has been merely skirting the vast potential field of automation . . . and utilities have not yet felt the tremendous load building that will come with true, full-scale automation.

Complete automation involves automatic operation of entire factories. Industry has hesitated to do this because a halt anywhere along the line could shut down a whole plant.

A completely automated line depends upon reliable control devices. The control devices that have been available up to this time operate with moving parts. They are not dependable in operations that involve over a few million cycles. Many millions of cycles are not uncommon in automation today.

Now Westinghouse has developed a new revolutionary electrical control called Cypak. It has no moving parts. It cannot wear out or get out of order. It can be counted upon to outlast the machine on which it is used. Ten years of life is a conservative estimate.

Cypak will be a great load builder for the electric utility industry.

Westinghouse Electric Corporation

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thought occurred to them that the consolidation of such information for a number of companies might be interesting.

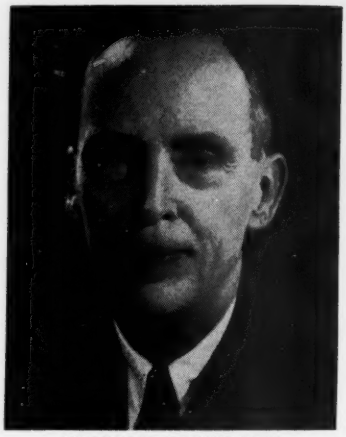
THIS article is, therefore, a study of tax contributions paid by certain commercial electric companies compared with dividends paid to owners and compared with operating payrolls. All taxes paid by representative southwestern electric companies amount to 200 per cent of cash dividends on common stock, and 150 per cent of operating payroll. The authors of this article, C. L. COOKE and BENNETT L. SMITH of the Community Public Service Company of Fort Worth, Texas, have made a thoughtful and careful analysis of the contributions made by electric utilities through their taxes in support of a central government which in turn supports publicly owned power operations. The authors conclude that government operation is the true giveaway of the national resources.

* * * *

THERE is a great deal of confusion over the proposal, which was killed in the House of Representatives at the recent session of the 84th Congress, to direct the Atomic Energy Commission to proceed with the building and operation of nuclear power reactors. This question is almost certain to arise again in Congress. Opponents say it is a movement to push the federal government into the newly developing atomic power business and discourage private enterprise therein. Proponents say it is nothing of the sort, but rather an effort to assist eventual commercial company participation by having the federal government absorb the expense and headaches of the uncertain pioneering stage. ERNEST R. ABRAMS, well-known author of business and economic articles, in his article beginning on page 300, has examined these arguments and gives us his conclusion of what the shooting is all about.

* * * *

THE veto by President Eisenhower, earlier this year, of legislation to exempt independent natural gas producers from Federal Power Commission jurisdiction has by no means solved problems which that measure sought to remedy. Probably in different forms, similar bills will be strongly urged in the next session of Congress. But the immediate need would appear to be a finding of common ground by the producers, the pipelines, and the distributors. WILLIAM PLUNKETT, Los Angeles analyst, in his article beginning on page 307, has made a thoughtful appraisal of this situation. His article suggests a realistic approach to remedial legislation which will retain necessary controls in the public interest, while at the same time relieving independent producers from unnecessary burdens of impractical regulation.



WILLIAM PLUNKETT

MR. PLUNKETT's career has been mostly in the investment banking business, in which he started as a salesman some fifteen years ago. He has in turn been an independent analyst, observer, and philosopher on the subject of gas and oil investment. Most of his assignments have been on the Pacific coast. His clients have included quite a number of the larger oil companies in that area, as well as independent producers of both oil and natural gas.

THE next number of this magazine will be out September 13th.

The Editors

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(September 13, 1956, issue)

★

WHO'S GIVING AWAY WHAT TO WHOM?

During the current political campaign we are hearing a good deal about the so-called "give-away" issue. But there is considerable confusion about what it means. Partisan orators on one side use the term as an epithet denouncing alleged proclivities of the other party in office in giving away natural resources which belong to all the people to private interests for commercial exploitation at a profit. The party orators on the other side contend that it is the opposition during long years in office which gave away the wealth of the nation in profligate spending and lending and subsidy at the expense of the taxpayer. Because of his background as a member of the House Appropriations Interior Subcommittee, he has always followed public policy matters affecting public utilities with considerable interest. Representative Frank T. Bow, Republican of Ohio, has given this question his personal attention since he was a House committee aide before his own election to Congress.

COMPENSATING PRODUCERS FOR GAS RESERVES

Regardless of who wins the election, one issue that is bound to come up in the next Congress is a question which is becoming a hardy biennial. Should the Federal Power Commission's jurisdiction over natural gas producers, as decreed by the U. S. Supreme Court, be repealed or modified? Following President Eisenhower's veto of a bill earlier this year which passed Congress with bipartisan support (against proportionate bipartisan opposition), there is an increasing question whether the next Congress will pass **any** further legislation along this line. Meanwhile, of course, the Federal Power Commission must go ahead with the exercise of its jurisdiction. Since it has not to date issued any decision laying down principles which it expects to follow in the regulation of independent producers, the field is wide open for suggestions and even speculation. Tilford A. Jones of the legal department of the United Fuel Gas Company gives us some interesting ideas on the question of whether the interests of gas consumers can be protected without fully compensating producers for their gas reserves. His article deals with one of the aspects of regulating the rates of the so-called independent producers which the FPC must come to grips with in the near future.

SETTLING THE CLARK HILL—CO-OP CONTROVERSY

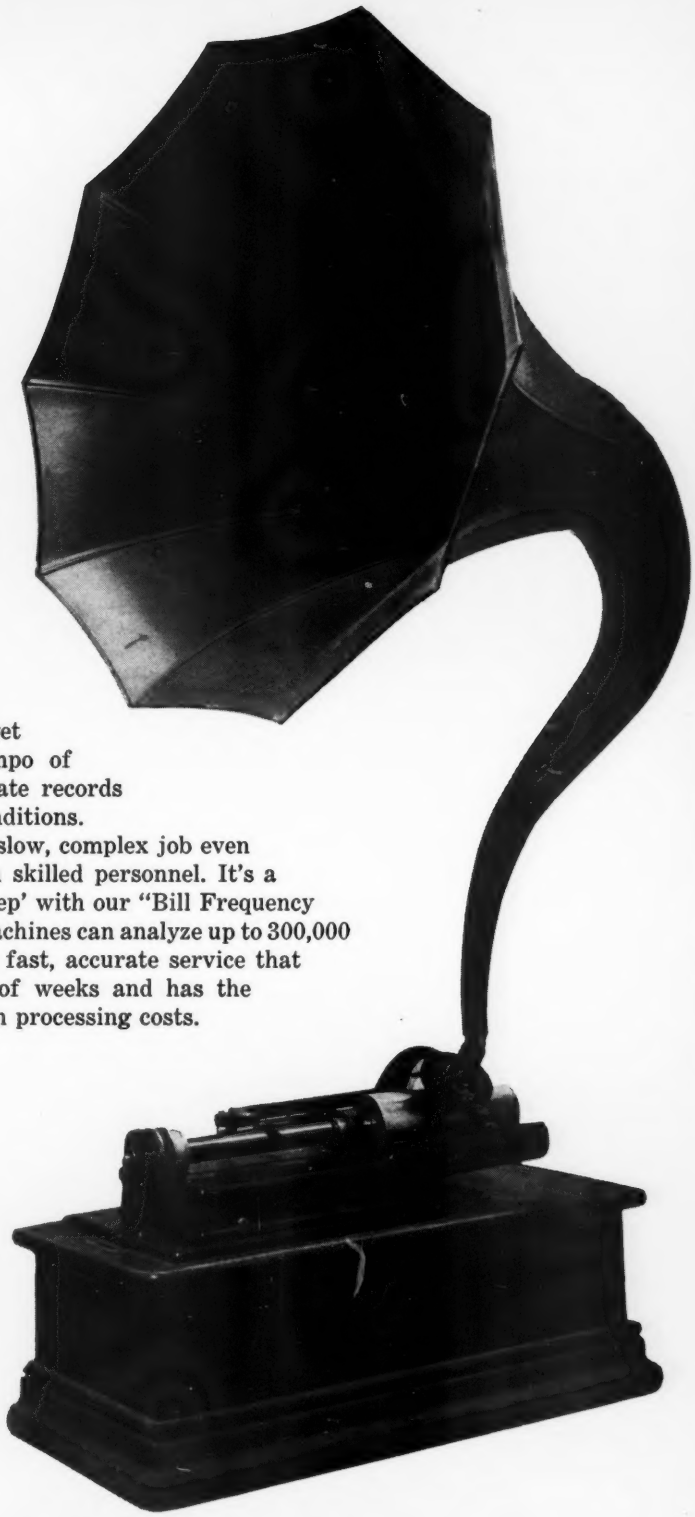
Ever since the Clark Hill dam in Georgia neared completion some years ago, the question of sharing the output among the Georgia Power Company and co-operatives and other so-called "preference customers" has been an exceedingly hard administrative nut to crack. The trouble is that the co-operatives operate in an area which is presently connected with the dam site only by facilities belonging to the power company. The problem of getting these parties together on a mutually agreeable arrangement is one with which the Interior Department has struggled through a number of drafts and revisions of proposed contracts. An agreement was finally reached last spring in which the power company made a number of concessions for the sake of peace in the area. C. E. Wright, former industrial magazine editor now residing in Jacksonville, Florida, has written an on-the-scenes report of how the agreement finally turned out and what it means to the various parties concerned.

★

Also . . . ***Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.***

Wind Instrument

It only played one record at a time, which had to be changed by hand and you had to wind it after every tune. This "music by muscle" machine was the marvel of its day but now it is a museum piece.



Hand compiled figures too often are "museum pieces" by the time you get them, they just can't meet the tempo of modern business that requires accurate records in a hurry to meet fast changing conditions. Case in point . . . rate analyses. It's a slow, complex job even when a utility company uses its own skilled personnel. It's a fast, simple job performed in 'One Step' with our "Bill Frequency Analyzer", because just one of these machines can analyze up to 300,000 bills in a *single* day. Investigate this fast, accurate service that gives you analyses in days instead of weeks and has the collateral benefit of saving you 50% in processing costs. *There is no obligation for estimates.*

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"The man who talks calmly and straight from the shoulder, using simple common sense, is the one that wins juries—and customers."

HENRY H. HEIMANN
Executive vice president, National Association of Credit Men.

"There is no better way to upset prosperity than to step on the gas and travel at a dangerous speed, or to jam on the brakes too suddenly."

LUTHER YOUNGDAHL
Judge, U. S. district court.

"When the basis of action by any branch of government remains hidden from scrutiny and beyond practical review, the seeds of arbitrary and irresponsible government are sown."

HARRY F. BYRD
U. S. Senator from Virginia.

"There is no such thing as a federal grant to the states. The money comes from them. Washington takes a deduction for federal administration. The federal government tells the states how to spend it."

EDITORIAL STATEMENT
The Wall Street Journal.

". . . despite the complaints about costlier credit, we think the market place makes a better manager of economic development than the erstwhile theory of endless boom created out of endless inflation."

HAROLD POWERS
Lieutenant Governor of California.

"An alien theory (gives the nation's capital a) dangerous concentration of power. More and more bureaus have been created and are presided over by bureaucrats over whom we, the people, have no direct control."

CARROLL M. SHANKS
President, Prudential Insurance Company of America.

"A business must be run intelligently these days if it is to succeed. It must be a smooth integration of individuals embued with loyalty and interest. Very often, the larger a business is, the more considerate, professional, and long-range its management's viewpoint is likely to be."

RAYMOND MOLEY
Columnist.

"The multiplication of rights may go so far that the entire concept of right may fall. For only a government vested with a tyrannical authority can possibly fulfill the requisites of Socialism. And such a government must of necessity deny certain basic rights that we already enjoy."

LOWELL B. MASON
Member, Federal Trade Commission.

"The American home is being deluged from morning until night with spurious TV-radio advertising claims, gimmicks, and the clamor of the shills. With the tremendous force exerted by this merchandising evident, we no longer can assume that the abuses are trivial and will be corrected some way, somehow, by some one."

One of the great threats to the mythical Jason and the Argonauts as they sought the Golden Fleece was passage of their ship between the forbidding rock of Scylla and the whirlpool of Charybdis. With steady hands Jason guided the *Argo* safely through the treacherous channel. To this day, Scylla and Charybdis remain a symbol of perilous hazard.

WHEN ENDURANCE COUNTS

Overcoming the perils of Scylla and Charybdis, Jason and the Argonauts demonstrated great endurance in the face of severe destructive elements. Another—and more modern—demonstration of great endurance is Kerite Cable. Under every manner of adverse condition, throughout the world, Kerite Cable stands steadfast against all the elements which would destroy its efficiency. Kerite Cables, in perfect operating condition after 40 or more years, in hazardous original installations, is the rule, rather than the exception. The world over, the Kerite name is recognized as a symbol of ***durability***.

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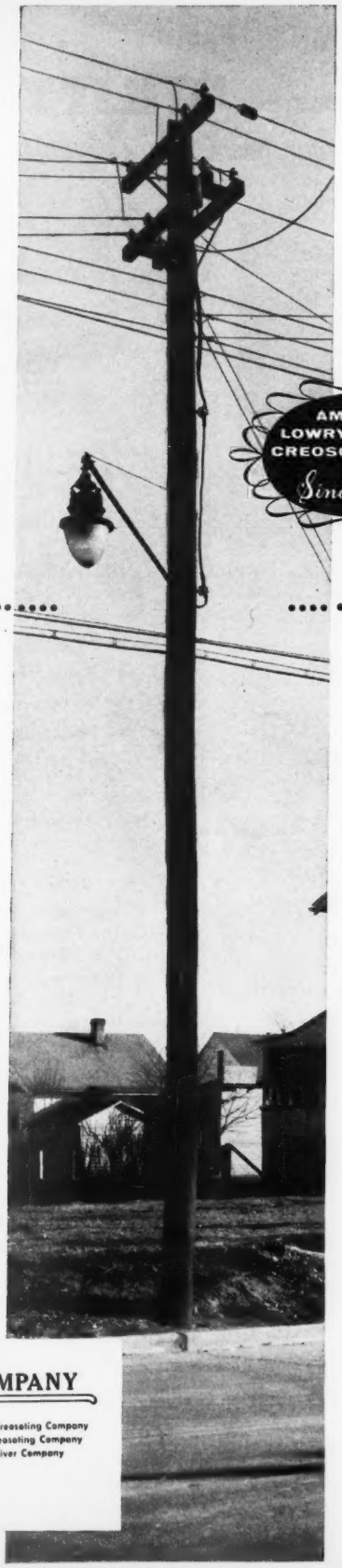

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UTILITIES *A·l·m·a·n·a·c·k*

AUGUST-SEPTEMBER

Thursday—30 *American Institute of Electrical Engineers will hold annual electrical conference of the petroleum industry, Kansas City, Mo. Sept 17–19.* ***Advance notice.***	**Friday—31** *American Transit Association will hold annual meeting, St. Louis, Mo. Sept. 17–19.* ***Advance notice.***	**SEPTEMBER** **Saturday—1** *American Water Works Association, Kentucky-Tennessee Section, will hold annual meeting, Chattanooga, Tenn. Sept. 17–19.* ***Advance notice.***	**Sunday—2** *Illuminating Engineering Society will hold national technical conference, Boston, Mass. Sept. 17–21.* ***Advance notice.***
Monday—3 *Instrument Society of America will hold annual instrument-automation conference and exhibit, New York, N. Y. Sept. 17–21.* ***Advance notice.***	**Tuesday—4** *Southeastern Gas Association will hold meeting, Raleigh, N. C. Sept. 19–21.* ***Advance notice.***	**Wednesday—5** *Rocky Mountain Telephone Association will hold annual convention, Salt Lake City, Utah. Sept. 20, 21.* ***Advance notice.***	**Thursday—6** *Michigan Independent Telephone Association begins annual convention, Grand Rapids, Mich.*
Friday—7 *New Jersey Gas Association begins annual meeting, Spring Lake, N. J.*	**Saturday—8** *Atomic Industrial Forum, Inc., will hold annual conference and trade fair, Chicago, Ill. Sept. 24–28.* ***Advance notice.***	**Sunday—9** *Independent Natural Gas Association begins annual membership meeting, San Antonio, Tex.*	**Monday—10** *American Society of Mechanical Engineers begins fall meeting, Denver, Colo.*
Tuesday—11 *Pacific Coast Gas Association begins annual meeting, Coronado, Cal.*	**Wednesday—12** *Mid-West Gas Association begins gas school and conference, Ames, Iowa.*	**Thursday—13** *Tennessee Telephone Association begins annual convention, Nashville, Tenn.*	**Friday—14** *Public Utilities Association of the Virginias begins annual meeting, White Sulphur Springs, W. Va.*

Courtesy, West Texas Utilities Company

Gas—Oil Country

Pastoral scene in the Abilene production area.

Public Utilities
FORTNIGHTLY

VOL. 58, NO. 5 AUGUST 30, 1956

Where Is the Giveaway?

A thoughtful and careful analysis of the contributions made by electric utilities through their taxes in support of a central government which in turn supports publicly owned power operations.

BY C. L. COOKE AND BENNETT L. SMITH*

Preface

THIS is a study of tax contributions by certain commercial electric companies compared with dividends paid to owners and with operating payrolls.

All taxes paid by representative southwestern companies amount to 200 per cent of cash dividends on common stock in dollar volume. Federal income tax on these companies plus the minimum tax paid by the common stockholders on their dividends are 202 per cent or more of what the owners retain after payment of income tax.

All taxes paid by representative southwestern companies amount to an average of 150 per cent of operating payroll.

Taxes paid by a representative electric company in the Pacific Northwest and by six representative companies in the vicinity of TVA likewise substantially exceed financial benefits received by the owners and the operating employees, respectively, of those companies.

*Assistant secretary-assistant treasurer and secretary, respectively, of Community Public Service Company, Fort Worth, Texas. For additional notes, see "Pages with the Editors."

The experience of the companies mentioned indicates with apparent certainty that the regulated, commercial, tax-paying, electric companies as a whole in the United States pay far more in taxes to government than to either the owners or the employees.

The people of the United States, all of whom are taxpayers directly or indirectly, therefore, benefit more from privately owned, tax-paying, development of natural resources than from development of those resources by government itself.

Government operation, then, is the true giveaway of those resources.

Where Is the Giveaway?

Is development of natural electric resources by regulated, commercial, tax-paying corporations a "giveaway" of those resources, as commonly charged by advocates of state-owned power? There is no giveaway because government is the principal financial beneficiary of the electric utility business.

Neither electricity nor government can ever be cost-free. Both require men and materials. When public power addicts talk about so-called low-cost government electricity, they mean tax-free and tax-subsidized electricity.

State ownership of electric power means tax-free and tax-subsidized electricity: Tax-free because government property is exempt from taxation; tax-subsidized because government depends on taxation to finance its electric projects. About 20 per cent of the nation's electricity is now produced and distributed by tax-free and tax-subsidized systems. If government electricity is low-cost, as claimed by its proponents, it is so because of tax immunity and subsidization.

Private ownership of electric power means tax-paying and nontax-subsidized electricity. About 80 per cent of the nation's electricity is produced and distributed by taxpayers. That proportion is declining. Tax-free and tax-subsidized public power projects and preferences extended by the federal government to government-owned or nonprofit electric systems are eroding the terrain of private power.

Between tax-free and tax-paying electricity, the ordinary citizen would likely reject tax immunity and choose tax-bearing systems because he is opposed to tax privilege and preference. The citizen would increasingly favor taxpayer development of electricity if he were sure that commercial electric companies are good public servants who pay a fair share of taxes.

Are tax-paying electric companies contributing their share of the cost of government through taxation? Are they worthy servants of the public? They are indeed as shown in the tables to follow.

Before deciding in favor of government electric power and against taxpayer electricity, American citizens should ascertain and consider the amount of taxes paid by commercial electric companies. If governments as a group receive more from those companies than any other group of participants, how can there be a giveaway of public property by having taxpayer companies supply the nation's electricity?

Tax payments by commercial electric companies make government the chief beneficiary of their operation. Development of natural resources by private enterprise is a financial gain for government

and taxpayers. Tax immunity is the prerogative of government. Governmental development of natural resources in the electric field hurts government and the taxpayers by loss of tax revenue. State operation is the real "giveaway" of natural resources.

Case for Public Power

PUBLIC power advocates proclaim development of electricity by federal, state, or municipal governments. These are the masters which already exact, through taxation, a fourth or more of a worker's toil. Commercial development of electric resources is opposed. Some condemn taxpayer construction of steam plants near government power projects and dams on navigable streams as giveaways of public property. The give-away charge was made when electric companies tried to build a generating plant near Tennessee Valley Authority and when Idaho Power Company proposed to build dams on the Snake river. The same wrong charge is made at every conflict between a tax-paying electric company and a governmental agency. "Giveaway" is a term dear to public power advocates in and out of government. It is a smear term with a false front.

Comparison of Benefits

PARTICIPATION in an enterprise determines the identities and the mutual rewards of the beneficiaries. How do recipients share in the revenues of an operation? The answer to that question shows who benefits most from an enterprise.

If one benefits more from a project than others, the most fortunate one is chief beneficiary. If the principal recipient puts no money into the enterprise, takes no risk of loss, and performs no direct labor, his take from the business is indeed a windfall. If the other sharers furnish the money, take all the risks of loss, or do all the direct work, and end up with less than the participant who does none of these things, they are, though more deserving, the lesser beneficiaries of the enterprise.

Let us now examine the financial participation in commercial electric companies. The participants here are the bondholders, the stockholders or owners, the employees, and state agencies. Are the owners or the employees of these com-

TABLE I

COMPOSITE OF THIRTEEN SOUTHWESTERN TAX-PAYING ELECTRIC COMPANIES ON A COMMON STOCK BASIS ON SHARES OUTSTANDING AT THE END OF EACH CALENDAR YEAR INVOLVED

Year	*All Taxes Per Share**	*Federal Income Tax Per Share**	*Earnings Per Share After Taxes*	*Cash Dividends Per Share*
1953	$2.72	$1.99	$1.95	$1.48
1954	2.66	1.88	2.08	1.65
1955	2.63	1.79	2.21	1.76
3-year Total	$8.01	$5.66	$6.24	$4.89
3-year Average	$2.67	$1.89	$2.08	$1.63

* Table I and all subsequent tables exclude all deferred taxes.

The all-tax average amounted to 128.37 per cent of earnings per share and 163.80 per cent of cash dividends per share.

panies the chief beneficiaries or does government exceed them in benefits?

Bondholders need not be considered because they receive a fixed rate of interest for money loaned. Although electric companies require large sums from bond buyers for plant additions, bond interest usually amounts to less than dividends and is also less than taxes. Bondholders, then, are not the chief beneficiaries of tax-paying electric companies.

Stockholders and employees remain as beneficiaries for comparison with government. Preferred stockholders receive too little for consideration in this comparison.

Common Stock Comparison

COMMON stockholders are left as the real owners of the business. They are the investors, anyway, who take the greatest risk of loss. Their profits are limited by regulatory laws to a fair return on the investment. They are not assured of or guaranteed any return at all. How do common stockholders compare with government in benefits derived from commercial electric companies?

Recent experience of electric companies operating in the South and Southwest supplies the answer. Their records for 1953, 1954, and 1955 should be representative of electric companies throughout the nation. Government is a silent partner in these enterprises. It is a partner which makes no financial contribution, assumes no risk of loss, performs no labor, but a partner which benefits more than either the common stockholders or the operating employees.

Thirteen electric companies operating in one or more of the states of Arkansas, Louisiana, New Mexico, Oklahoma, and Texas, for example, paid more in recent years to the governmental partners than to the owners of the companies.[1] Table I (page 291) tells the story on a composite basis for the group.

The tax toll of the thirteen southwestern companies would be larger but for the fact that many of them have obtained federal tax deferment by quick amortization of defense facilities. The tax amounts shown in Table I exclude all deferred federal income tax. When the five-year period allowed for quick amortization expires, government's share of earnings will increase. All tax tables herein are, to the extent of tax deferments, understatements of governmental benefits.

THE tax tables do not tell the full story of taxes paid by these companies. There are many hidden and indirect taxes, for example, which are not revealed in the record of direct taxes but which, nevertheless, add to state benefit from the enterprises. Common stockholders, as another example, pay an additional tax on cash dividends received from the electric companies. The federal government and some states plow this tax field twice by taxing both the corporations and the stockholders.

The stockholders in Table I received composite average dividends equal to $1.63 per share per annum. The stockholders paid at least 20 per cent of these dividends in federal income tax. The dividend

[1] The thirteen companies are: Central Power & Light Company; Community Public Service Company; Dallas Power & Light Company; El Paso Electric Company; Gulf States Utilities Company; Houston Lighting & Power Company; Public Service Company of New Mexico; Southwestern Electric Service Company; Southwestern Gas & Electric Company; Southwestern Public Service Company; Texas Electric Service Company; Texas Power & Light Company; and West Texas Utilities Company.

TABLE II

COMPARISON OF MINIMUM TAX CONTRIBUTIONS OF THIRTEEN SOUTHWESTERN COMMERCIAL ELECTRIC COMPANIES AND THEIR COMMON STOCKHOLDERS AND MAXIMUM "TAKE-HOME" CASH DIVIDENDS OF COMMON STOCKHOLDERS FOR THREE-YEAR AVERAGE FOR YEARS 1953, 1954, AND 1955

3-year Average Federal Income Tax Contribution of Corporations and Common Stockholders Per Share	*3-year Average Earnings Per Share Of Common Stock After Taxes*	*3-year Average Take-home Cash Dividends Per Share of Common Stockholders*
$2.22	$2.08	$1.30

This average federal income tax on corporations and owners amounted to 106.73 per cent of maximum average earnings per share and 170.77 per cent of maximum average take-home cash dividends.

TABLE III

AGGREGATE TAXES, EARNINGS AFTER TAXES, AND CASH DIVIDENDS OF THIRTEEN SOUTHWESTERN COMMERCIAL ELECTRIC COMPANIES FOR 1953, 1954, AND 1955

Year	*All Taxes*	*Federal Income Taxes*	*Net Earnings on Common Stock After Taxes*	*Cash Dividends On Common Stock*
1953	$ 84,119,000	$ 61,650,000	$ 60,237,000	$ 37,537,000
1954	87,795,000	62,223,000	68,687,000	44,184,000
1955	89,211,000	60,622,000	75,024,000	48,524,000
3-year Total	$261,125,000	$184,495,000	$203,948,000	$130,245,000
3-year Average	$ 87,042,000	$ 61,498,000	$ 67,983,000	$ 43,415,000

This all-tax average equaled 128.03 per cent of earnings on common stock and 200.49 per cent of cash dividends on common stock.

TABLE IV

COMPARISON IN DOLLAR VOLUME OF MINIMUM TAX CONTRIBUTIONS OF THIRTEEN SOUTHWESTERN COMMERCIAL ELECTRIC COMPANIES AND MAXIMUM "TAKE-HOME" CASH DIVIDENDS OF COMMON STOCKHOLDERS FOR THREE-YEAR AVERAGE FOR YEARS 1953, 1954, AND 1955

3-year Average Composite Federal Income Tax Contribution of Corporations And Common Stockholders	*3-year Average Composite Earnings on Common Stock after Taxes*	*3-year Average Composite Take-home Cash Dividends to Common Stockholders*
$70,181,000	$67,983,000	$34,732,000

This average federal income tax on corporations and owners equaled 103.23 per cent of average earnings and 202.06 per cent of maximum take-home cash dividends on common stock in dollar volume.

credit allowed in the 1954 Revenue Act is too insignificant for consideration. The stockholder's average dividend of $1.63 was reduced by 20 per cent (33 cents) or more by his own income tax, leaving a maximum of $1.30 in take-home pay per share per annum. The federal government received $1.89 from the thirteen companies for the three-year average per share of common stock. With 20 per cent (33 cents) or more of tax on cash dividends added to the income tax on the cor-

porations, the federal government averaged at least $2.22 per share from the corporations and stockholders for the three-year period, contrasted with $1.30 in maximum take-home pay for the common stockholders. Table II (page 293) recapitulates this story.

TAXES paid by the thirteen southwestern commercial electric companies exceeded both net earnings after taxes and cash dividends to common stockholders in dollar volume. Table III (page 293) shows this comparison.

Federal income tax on cash dividends to common stockholders increased the tax benefits shown in Table III derived from the thirteen enterprises. The sum of $43,415,000 for cash dividends on a three-year average was reduced 20 per cent ($8,683,000) or more for federal income tax, leaving common stockholders with $34,732,000 or less after federal income tax. The three-year average federal income tax on the corporations in the sum of $61,498,000 was increased by $8,683,000 to a total of $70,181,000 on the corporations and their stockholders. Table IV (page 293) restates this comparison.

Payroll Comparison

How does government, which receives more from the operation of tax-paying electric companies than the owners, compare with the employees of these companies in benefits? Certainly the payroll siphons a large portion of revenue. If the tax roll exceeds the payroll, then truly government is the chief financial beneficiary of the commercial electric business. The records of nine southwestern electric companies for the three most recent years supply the answer. Again the answer favors government.[2] (See Table V, page 295.)

Hell's Canyon

THE conflict between state and taxpayer development of electricity is at white heat in the Pacific Northwest. Public power advocates would have the federal government build a high dam for hydroelectric power in Hell's Canyon on the Snake river in Oregon. The cost of the high dam is estimated at about $400,000,000.

Idaho Power Company is now constructing a series of three low hydroelectric dams on the Snake river. The power company's cost is estimated at $133,000,000, a third of the government's estimate for the *high dam project.* Let us look at the record of Idaho Power Company to determine its chief beneficiary. Table VI (page 296) favors the government.

The 1,100 employees of Idaho Power Company also fell behind government's share of the business in 1954. See Table VII (page 297) for payroll comparison with taxes. Data for 1955 are not available.

Government will get more taxes if and when Idaho Power Company develops the Snake river. Government and Idaho Power's owners and employees should continue to split the power company's revenues in present proportions. The power company estimates that its development will provide $10,000,000 annually in new taxes. The federal government will get $6,000,000 in new taxes per year, the

[2] Operating payroll amounts are not available for four of the thirteen companies listed in Footnote 1. The four companies omitted from Table IV are: Public Service Company of New Mexico, Southwestern Electric Service Company, Southwestern Public Service Company, and Texas Electric Service Company.

states of Idaho and Oregon, $4,000,000.

These comparisons prove that federal, state, and local government will benefit most by having Idaho Power Company take the risk and do the work of developing hydroelectricity on the Snake river. There will be a giveaway of tax benefits if the federal government spends nearly a half-billion dollars contributed by the nation's taxpayers, including Idaho Power Company, for a project which will not be subject to taxation when built.

It may be argued that electric users in the Pacific Northwest could benefit from electric rates made cheaper by the tax immunity and subsidization which government projects on the Snake river would bring. Lower electric rates would have no more than local effect, but the tax loss would be nation wide in scope. If government electricity is cheaper than taxpayer electricity, which may not be the case, national interest in taxes should prevail over lower, tax-free and tax-subsidized electric rates in a favored area.

Tennessee Valley Authority

SIX commercial electric companies which operate in the shadow of Tennessee Valley Authority also support government as their chief financial beneficiary. Table VIII (page 297) shows how government and common stockholders fare in these companies.[3]

Table IX (page 297) compares government and common stockholders of the same companies in dollar volume.

Operating employees of the six commercial electric companies adjacent to Tennessee Valley Authority fall behind government in receipts from these enterprises, as shown in Table X (page 297).

THERE is no way to compare on a stock or employee basis the tax immunity of Tennessee Valley Authority, a government-owned corporation, with tax benefits received by government from the operation of neighboring tax-paying electric companies. A tax comparison can be made, however, on the basis of the percentage of gross receipts which the commercial electric companies pay in taxes. Table XI (page 298) states the composite percentage of gross receipts paid to government for the past three years by these southern electric companies.

Tennessee Valley Authority enjoys governmental immunity from taxation.

[3] This group includes: Alabama Power Company; Arkansas Power & Light Company; Georgia Power Company; Kentucky Utilities Company; Louisiana Power & Light Company; Mississippi Power & Light Company.

TABLE V

COMPARISON OF AGGREGATE TAXES AND OPERATING PAYROLLS OF NINE SOUTHWESTERN COMMERCIAL ELECTRIC COMPANIES FOR 1953, 1954, AND 1955

Year	*All Taxes*	*Federal Income Tax*	*Operating Payroll*	*Ratio of All Taxes To Operating Payroll*
1953	$ 67,705,000	$ 48,320,000	$ 42,709,000	159%
1954	64,779,000	47,918,000	44,763,000	145%
1955	69,344,000	47,592,000	46,649,000	149%
3-year Total	$201,828,000	$143,830,000	$134,121,000	150%
3-year Average	$ 67,276,000	$ 47,943,000	$ 44,707,000	150%

The authority does make payments in lieu of taxes to certain states and counties. The surrounding commercial electric companies pay out an average of 18.9 per cent of their gross income as taxes. Table XII (page 298) shows how much Tennessee Valley Authority has paid in lieu of taxes and how much it likely would have paid if it had been a commercial electric enterprise for the past two fiscal years.

THE government's tax loss in the TVA area is greatly increased through distribution of electricity by tax-exempt municipal agencies. Government would gain if electricity were distributed in the TVA country by taxpayers. Government's tax benefit from taxpayer distribution of electricity would be at about the same rate of gross receipts now paid by the surrounding commercial electric companies.

Since these companies pay an average of 18.9 per cent of their gross receipts as taxes, government loses by at least that amount in the TVA empire.

Each and every one of the six southern companies is more beneficial to the federal government and thereby to all of us as taxpayers than is the TVA operation. And altogether the six companies paid $107,876,000 to the federal government in three years; the Tennessee Valley Authority, nothing in taxes. Yet government power advocates wrongly urge that TVA benefits all the people on the socialistic theory that it belongs to them. This claim confuses a false assertion of ownership with benefit.

A sensible individual would soon rid himself of a losing enterprise, regardless of ownership theories, just as a poultryman culls his flock, and retain and promote profitable ones instead.

THE American people would likewise dispose of government power projects if they were sufficiently aware of the plain fact of financial loss from such projects and financial gain from taxed electric companies. While inattention to this situation by the American public is easily understood, it is more difficult to understand how some legislators and other public officials, charged as they are with responsibility for the nation's heavy tax burden, can disregard the tax loss involved in government power projects.

TABLE VI

IDAHO POWER COMPANY
COMPARISON OF TAXES, EARNINGS PER SHARE AFTER TAXES, AND CASH DIVIDENDS ON A COMMON STOCK BASIS FOR 1954 AND 1955*

Year	*All Taxes Per Share*	*Federal and State Income Tax Per Share*	*Earnings Per Share after Taxes*	*Cash Dividends Per Share*
1954	$3.05	$1.67	$1.80	$1.10
1955	3.02	1.62	1.87	1.67
2-year Total	$6.07	$3.29	$3.67	$2.77
2-year Average	$3.03	$1.64	$1.83	$1.38

* Table VI reflects 1955 2-for-1 split of common stock.
All taxes amounted to 29.4 per cent of Idaho Power Company's operating revenues in 1954, and 27.6 per cent in 1955. These taxes and Tables VI and VII exclude deferred income taxes.

TABLE VII

IDAHO POWER COMPANY
COMPARISON OF TAXES AND OPERATING PAYROLL FOR 1954

Year	*All Taxes*	*Federal and State Income Tax*	*Operating Payroll*	*Ratio of All Taxes To Operating Payroll*
1954	$6,857,000	$3,763,000	$3,367,000	204%

TABLE VIII

COMPOSITE OF SIX SOUTHERN COMMERCIAL ELECTRIC COMPANIES ON A COMMON STOCK BASIS ON SHARES OUTSTANDING AT THE END OF EACH CALENDAR YEAR INVOLVED

Year	*All Taxes Per Share*	*Federal Income Tax Per Share*	*Earnings Per Share after Taxes*	*Cash Dividends Per Share*
1953	$2.43	$1.59	$1.55	$1.16
1954	2.46	1.48	1.65	1.24
1955	2.34	1.35	1.73	1.26
3-year Total	$7.23	$4.42	$4.93	$3.66
3-year Average	$2.41	$1.47	$1.64	$1.22

TABLE IX

AGGREGATE TAXES, EARNINGS AFTER TAXES, AND CASH DIVIDENDS IN DOLLARS OF SIX SOUTHERN COMMERCIAL ELECTRIC COMPANIES FOR 1953, 1954, AND 1955

Year	*All Taxes*	*Federal Income Taxes*	*Net Earnings on Common Stock After Taxes*	*Cash Dividends On Common Stock*
1953	$ 57,791,000	$ 37,982,000	$ 37,076,000	$ 27,600,000
1954	60,409,000	36,254,000	40,529,000	30,469,000
1955	58,161,000	33,640,000	42,889,000	31,633,000
3-year Total	$176,361,000	$107,876,000	$120,494,000	$ 89,702,000
3-year Average ...	$ 58,787,000	$ 35,959,000	$ 40,165,000	$ 29,901,000

TABLE X

COMPARISON OF AGGREGATE TAXES AND OPERATING PAYROLLS OF SIX SOUTHERN COMMERCIAL ELECTRIC COMPANIES FOR 1953, 1954, AND 1955

Year	*All Taxes*	*Federal Income Taxes*	*Operating Payroll*	*Ratio of All Taxes To Operating Payroll*
1953	$ 57,791,000	$ 37,982,000	$ 47,950,000	121%
1954	60,409,000	36,254,000	49,840,000	121%
1955	58,161,000	33,640,000	51,297,000	113%
3-year Total	$176,361,000	$107,876,000	$149,087,000	118%
3-year Average	$ 58,787,000	$ 35,959,000	$ 49,696,000	118%

Conclusion

TAX-PAYING electric companies are useful servants of the public and their government. These companies serve the public by converting fuel or falling water into electric energy and transporting that

TABLE XI

GROSS RECEIPTS AND TAXES OF SIX SOUTHERN COMMERCIAL ELECTRIC COMPANIES

Year	*Gross Receipts*	*All Taxes*	*Percentage of Taxes To Gross Receipts*
1953	$283,195,000	$ 57,791,000	20.4%
1954	313,592,000	60,409,000	19.3%
1955	334,307,000	58,161,000	17.4%
3-year Total	$931,094,000	$176,361,000	18.9%
3-year Average	$310,365,000	$ 58,787,000	18.9%

energy to the nation's homes, shops, and factories. Investors large and small furnish from their savings the huge sums of capital required in the process. The return on the capital is limited by law and is low in amount. Many persons devote their working lives to these electric enterprises as employees. Their pay is moderate.

Electric company investors supply the large amounts of capital required for generating and transporting electricity. Government's cost for its electric projects, on the other hand, must be obtained from taxes, and such cost adds that much more to the total tax burden. A government dam at Hell's Canyon, for example, will add $400,000,000 to the nation's debt.

A COMPOUNDED tax loss thus results from government-owned electric projects. Government ownership not only deprives government of the taxes which electric company developers would pay but also adds government's cost of the projects to the total tax bill charged to taxpayers.

Commercial electric companies serve the public in another way by paying more of their revenues to government in taxes than to stockholders or employees.

ELECTRIC utility companies are not entitled to and do not seek any special recognition as useful servants of mankind. They hope for and expect recognition as good and faithful servants. They do not ask for preferential tax treatment. What they want is an opportunity to keep on working for the public. Legislators too often subject their tax-paying electric servants to tax-free or tax-subsidized competition. Legislative preference for public power is wrong. Those in government, who live on taxes themselves, should rather encourage development of natural electric resources by tax-paying companies in the interest of other taxpayers and the public. The giveaway of these resources is not by taxpayer, but by governmental, operation.

TABLE XII

PAYMENTS IN LIEU OF TAXES BY TVA AND AT AVERAGE TAX RATE OF SIX COMMERCIAL ELECTRIC COMPANIES FOR THE TWO LAST FISCAL YEARS ON THE BASIS OF GROSS REVENUE FROM POWER SALES OF TVA

Fiscal Year	*Gross Revenues From Power Sales*	*TVA Payments in Lieu of State and Local Taxes*	*Taxes at Commercial Electric Rate of 18.9%*
1954	$134,000,000	$ 3,579,000	$ 25,326,000
1955	188,200,000	3,878,000	35,570,000
2-year Total	$322,200,000	$ 7,457,000	$ 60,896,000
2-year Average	$161,100,000	$ 3,728,500	$ 30,448,000

WHERE IS THE GIVEAWAY?

THE immense impact of taxation presents a danger to commercial electric companies and the nation. Since tax support of government exceeds wages of employees and dividends to owners in these companies, tax-free state electricity can mean cheaper electricity than the companies provide. Pressure groups may seek, and politicians to lure votes may promise, tax-free and tax-subsidized electricity for favored localities.

Government competition impelled by tax exemption is an increasing danger to tax-paying electric companies. State-owned electricity now amounts to about 20 per cent of the nation's total, and has grown tremendously in the last twenty-five years. The trend in Congress appears at times to favor tax-free public power.

Tax-exempt electricity is a danger to the nation and its taxpayers. The whole tax system can break down from a vicious circle of tax preferences. If the people in Tennessee get a tax privilege, for example, then citizens elsewhere can and will demand favoritism. As more and more persons get on the tax-free band wagon, fewer and fewer taxpayers will be left to support the government. Taxpayers benefit from spreading the tax base and suffer when the tax base is limited. Citizens and their lawmakers in their own interest should insist on development of electricity by taxpayers and not by government.

The northwestern, southern, and southwestern electric companies studied in this discussion are representative of the entire national electric power industry. What is true for these companies should be true for all. A similar comparison for all electric utilities in the United States would, undoubtedly, establish government as the chief financial beneficiary of the whole industry.

THE fact that electric utility companies pay more to government in combined taxes than to either the common stockholders or operating employees of these companies proves the thesis of this discussion, which is: that the true giveaway of natural electric resources is by government development of such resources.

Such giveaways should be stopped in the public interest and stopped now. To prevent giveaways and to conserve natural electric resources for the benefit of government and the taxpayers, those in government, national and state, should encourage regulated, commercial, tax-paying electric companies to develop and supply the nation's electricity.

"EMPLOYEES *who have been working for the government seem to object to the termination of a commercial-type operation, even if it would turn production over to private industry which is currently seeking employees in the same labor market. We have been telling the world for years about the advantages of our free competitive enterprise system. We should certainly have the courage to practice our beliefs, and you taxpayers can help.*"

—PERCIVAL F. BRUNDAGE,
Deputy director,
Bureau of the Budget.

Government or Company Nuclear Power Development?

The recent 84th Congress killed, for the time being, a bill to direct the Atomic Energy Commission to proceed with the building and operation of nuclear power reactors—more popularly known as atomic power plants. But this adverse vote in the House of Representatives is not likely to be the end of the matter.

By ERNEST R. ABRAMS*

UNDER the guise of insuring that the United States will maintain its lead in the so-called race to develop nuclear reactors for the economical generation of electric energy, government power advocates are pressing for an all-out "crash" program of reactor construction by federal agencies. With most of the even politically feasible water-power sites in the country already harnessed, these tax-money spenders are waging a determined fight to gain government control of atomic energy in the peacetime program and thus protect their vested interests in the electric supply field.

In the promotion of vast federal projects like TVA and Grand Coulee, they advanced such constitutional objectives as navigation improvement, flood control, and irrigation to mask their true purpose of power generation, but none of these constitutional ends exist in the construction of atomic-powered electric-generating plants to justify the expenditure of billions of taxpayers' money. So they had to find a new "gimmick": Keep the U. S. in the lead in the atomic race.

To be sure, Senator Albert Gore of

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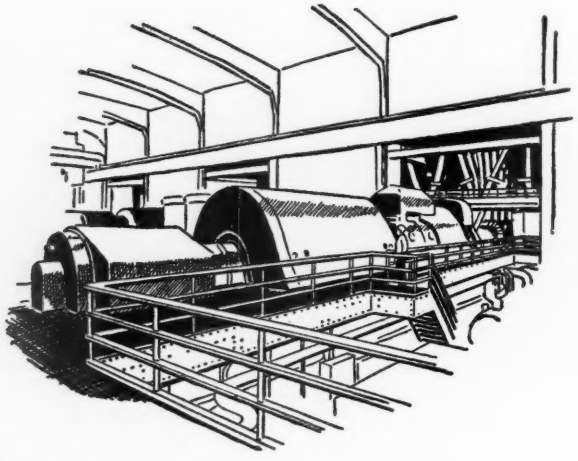


Tennessee, who has introduced a bill to authorize construction by the Atomic Energy Commission of six reactors of different types in six separate sections of the land, denies that his proposed legislation is prompted by any desire to put the federal government further into the field of electric generation. Nevertheless, the bill in much modified form was defeated in the House of Representatives mainly by Republican votes. Speaking before the Joint Committee on Atomic Energy on May 23, 1956, Gore said: "This is not and must not be considered as a controversy revolving around the issue of public power *versus* private power. It is simply a matter of getting the job done as quickly as possible."

PERHAPS the best refutation of that claim was made by Charles E. Oakes, president of Pennsylvania Power & Light Company, two days later, when he told the Joint Committee that he regarded the proposed legislation as an attempt to block the normal future growth of the electric utility industry through pre-emption by the government of the nuclear power field and said that his opinion "is fortified by the enthusiastic endorsement of the (Gore) bill by well-known public power advocates."

As examples of these endorsements, Leland Olds, former chairman of both the New York State Power Authority and the Federal Power Commission, recently stated that public agencies and co-operatives would be unable to participate in generation of electric power with nuclear energy without large federal appropriations, because of lack of funds and technical resources. William S. Peterson, chief engineer of the Los Angeles Department of Water and Power and vice chairman of the American Public Power Association's atomic energy committee, has called for sufficient federal funds to develop 100,000,000 kilowatts of atomic-powered generating capacity by 1977. And spokesmen for the National Rural Electric Co-operative Association, the Cooperative League of the U. S. A., and AFL-CIO have been enthusiastic in their endorsement of these demands. It would appear, then, that the proposal to force the Atomic Energy Commission to build six nuclear power reactors in different parts of the country against its will is, to put it mildly, at least acceptable to government power exponents.

JUST where does the United States stand today in the so-called "race" for leadership in nuclear power development? The claim is made that aside from the 60,000-kilowatt plant at Shippingport, Pennsylvania, which is being financed largely by the federal government under the Atomic Energy Act of 1946 and is scheduled to go into operation next year, no nuclear generating plants are under construction today. It is further claimed that although the AEC is negotiating with five groups for the construction of reactors, no actual construction has started under the 1954 Atomic Energy Act, and even if the projected completion dates for these projects are met, we would have only 689,000 kilowatts of nuclear capacity, including the Shippingport plant, in operation by 1960.

After noting AEC authorization of the 236,000-kilowatt nuclear plant of Consolidated Edison Company of New York and the 185,000 atomic-powered generating plant of Commonwealth Edison Company of Chicago, both of which are to be completed in the fall of 1960, Harllee Branch,

former EEI president, told the June, 1956, convention that 44 electric companies are participating, individually or in groups, in the planning of seven large and medium-sized reactor plants as well as two small plants, which will have a combined capacity of more than 1,000,000 kilowatts and will cost about $300,000,000. In addition, 95 companies in 13 groups are engaged in atomic power study programs with access permits already issued to 113 companies. So much for the United States at the moment.

GREAT BRITAIN is scheduled to place a dual-purpose plant for the production of both power and plutonium in operation this fall; another plant of the same type is now under construction, and, during the next decade, construction of a total of 16 plants with a combined capacity of from 1,500,000 to 2,000,000 kilowatts will be completed. The Russians, likewise, have announced another 5-year plan calling for the construction of between 2,400,000 and 2,500,000 kilowatts of nuclear capacity by 1960, with a considerable part of it to be in operation by 1958.

Commenting on the position of the United States in the kilowatt "race," Chairman Lewis L. Strauss of AEC has said that if it were "logically necessary," we could build millions of kilowatts of nuclear generating capacity by 1960, but it would not be economically competitive power, and that the AEC does not consider the fact that some other countries have announced plans to build a vast amount of nuclear capacity "a persuasive reason" for starting a crash program to outmatch them. He said that the primary problem in the United States is one of cost and not of feasibility, that the AEC is exploring a large number of reactor concepts, and that its present goal is more scientific knowledge and not merely more kilowatts.

The mere number of kilowatts to be in operation by 1960 is not "very meaningful," in his opinion. Some countries short of conventional fuels might construct nuclear plants before they were proven economically competitive, or they might feel that the propaganda incident to a mere leadership in number of kilowatts constructed, regardless of their economic

TABLE I

INSTALLED GENERATING CAPACITY IN MKW

Year	*Privately Owned*	*Nonfederal Public*	*Federal*	*Total*
1955	86,887	10,522	16,962	114,371
1945	40,307	4,722	5,081	50,111
1935	21,820	2,717	299	34,836
		Per Cent of Total		
1955	75.97	9.20	14.83	100.0
1945	80.43	9.38	10.19	100.0
1935	91.34	7.99	0.87	100.0
		Percentage Increase		
$\frac{1955}{1945}$	115.56	122.80	233.44	128.23
$\frac{1955}{1935}$	173.03	287.26	5,572.94	228.31

justification, might outweigh excessive costs. "We have an expanding and aggressive reactor development program," he said, "which we are convinced will develop the best possible technology and enable us to maintain our position of leadership."

THE ironic part of this story is that when the AEC did get together with a private industry group on a new type plant, the Gore Bill advocates hollered "stop" or at least "slow down." AEC issuance on August 8th of a construction permit for a "fast breeder" type nuclear power plant in Michigan aroused protest, primarily in political circles. The permit, granted to the Power Reactor Development Company, an industrial and utility group, is not an operating license.

AEC indicated that no such license would be issued until any questions about safety of the reactor were resolved. Criticism from Chairman Anderson (Democrat, New Mexico) and other members of the Joint Committee on Atomic Energy called the AEC authorization "precipitate" in view of safety problems and charged that the move "sets a dangerous precedent in the early stages of AEC regulative and quasi-judicial activity." Both AEC and the company (known as the Detroit Edison group) have expressed the belief that the safety factors can be cleared up "within a reasonable time." The earliest specified completion date is not until December, 1959. AEC stressed the importance of the fast breeder reactor program in issuing the construction permit recently, and pledged assistance to the company in eliminating any possible public hazard from the reactor's operation. Objective editorial reaction in the press predominantly supported the AEC's action.

This controversy is believed to stem, of course, from political differences as to the rôle of the federal government in accelerating the nuclear reactor program. Administration resistance to proposed AEC development and operation of prototype reactors (the defeated Gore Bill) during the 84th Congress is in the background of current criticisms from Chairman Anderson, Representative Holifield (Democrat, California), and others. But it is noteworthy that these were among the most articulate critics of the AEC and private industry for not getting started sooner and moving faster on atomic power plant development. One might well wonder if they would be complaining at all if the proposed Michigan plant were a public ownership project. In other words, does this criticism come mainly from those who favor government power, anywhere, anyhow, any time, and no matter what?

THE natural uranium, graphite, gas-cooled reactor now being completed for operation this fall in Great Britain, according to Philip Sporn, president of American Gas & Electric Company, has fewer technical problems than any other commercial reactor proposed today, but it also has many disadvantages, which are its size, higher cost, and the need of utilizing a gas-to-gas transfer of heat—an extremely inefficient method. Because fuel shortages threatened the entire national economy, a condition which does not exist in this country, the British had no other choice.

W. F. Libby, a member of the AEC, advised the Joint Committee that without specific knowledge of the types of reactors to be built, their size, location, and other relevant data, it was impossible to estimate

TABLE II

GENERATION IN MILLION KILOWATT-HOURS

Year	*Privately Owned*	*Nonfederal Public*	*Federal*	*Total*
1955	420,520	35,945	88,939	546,404
1945	180,926	13,560	28,000	222,486
1935	89,330	5,420	555	95,287
		Per Cent of Total		
1955	76.96	6.58	16.46	100.0
1945	81.32	6.09	12.60	100.0
1935	93.75	6.67	0.58	100.0
		Per Cent Increase		
$\frac{1955}{1945}$	132.43	165.09	217.61	145.59
$\frac{1955}{1935}$	393.14	563.19	1,592.50	473.53

accurately the cost of the six reactor program proposed by the Gore Bill. But from the information at hand, he placed the cost at some $400,000,000, said that it would take from four to five years for their construction, and that, in addition to straight construction outlays, $200,000,000 would have to be provided to cover operating costs, of which only 25 per cent could be recovered from power sales over the first ten years of operation. This was due, in part, to the fact that the output of the plant for at least the first five years would not be firm power, owing to the experimental nature of the plants and the need for unpredictable shutdowns of uncertain length.

So far, two major hurdles have stood in the path of full co-operation by investor-owned companies in nuclear reactor development. First, the private insurance companies have acknowledged their inability to insure against total liability, should a nuclear reactor go "haywire" and great public damage result. However, Chairman Clinton P. Anderson of the Joint Committee introduced a bill in the Senate providing for governmental indemnity beyond the limits collectible from insurance companies, while the Cole Bill in the House, containing AEC's ideas, would have accomplished the same purpose. Both were left at the post when the 84th Congress

adjourned without final action. Second, some private utilities have hesitated in joining nuclear development groups in the fear they might be subjected to SEC regulation under the Holding Company Act. But the SEC by an adopted rule now proposes to exempt them from this type of regulation until the project has passed the experimental stage and begins producing power commercially.

Should public power exponents eventually succeed in forcing Congress to adopt legislation authorizing a crash program of nuclear reactor construction by federal agencies, great harm could be done not only to security holders of privately owned electric utilities but to the entire national economy as well. This will result, in part, from inclusion in the Atomic Energy Act of 1954 of two provisions, requiring that preference shall be shown public bodies and co-operatives in the sale of energy produced in these plants. Section 34 of the 1954 act reads, in part, that "the commission shall give preference and priority to public bodies and co-operatives or to privately owned utilities providing electric service to high-cost areas not being served by public bodies or co-operatives," in the sale of electric energy.

Again, in § 182(c), the act provides that when conflicting applications are made for the purchase of electric energy produced at federal power reactors, public bodies and co-operatives "shall be given preferred consideration." In other words, tax-paying, investor-owned electric companies will be denied this power, when a tax-free public body or co-operative wants it.

DUE to the power policies of the New Deal and the Fair Deal during the 1932-52 years and the enthusiastic promotion of government power systems to take advantage of the preference clauses contained in other acts of Congress, the position of the investor-owned electric utilities deteriorated sharply and this trend will be continued with federal construction of nuclear power reactors. Although the installed generating capacity of the entire electric utility industry rose from 34,836,000 kilowatts in 1935 to 114,371,000 kilowatts in 1955, or by 228.3 per cent, the rates of gain of the three major divisions of the industry varied widely, as can be seen in Table I, page 302.

This decline in position of the investor-owned industry in the past twenty years has been almost entirely the result of public development of water-power sites in the earlier years of the decade, plus the expansion of thermal capacity necessary to "firm up" the hydro capacity of certain projects. However, the sharp increases in generation of publicly owned electric systems can be attributed mostly to the impact of preference clauses and the inequality of taxation between public and private systems. Changes in generation in the 1935-55 years are shown in Table II, page 304.

IN view of the "shot in the arm" that will be given public power bodies by the preference clauses in the 1954 Atomic Energy Act, it appears that the tax bills of investor-owned power companies will be sharply increased by even a partial federal monopoly of nuclear power generation. During 1955, the private electric companies paid $1,631,000,000 or 23.6 per cent of the operating revenues in taxes, with $1,003,000,000 going to the federal government alone. But government-owned systems paid no federal taxes whatever and

made only token payments in lieu of taxes to state and local governments. But if the public systems had paid taxes at the same rate as the private companies, our various governments would have received an added $370,000,000 for their support and 21.5 per cent of electric consumers would not have received a free ride at the expense of customers of tax-paying private power companies.

Even more important than the adverse effect on the investor-owned electric utilities of government entrance into and domination of the field of nuclear power reactor development is the retarding impact it would exert upon the entire national economy and its threat to continued U. S. leadership in the peacetime use of the atom in the whole world. For one thing, there are only a limited number of technicians capable of designing nuclear reactors, only a relatively few manufacturers qualified to produce the necessary equipment, and only a limited number of engineer-contractors with the necessary skills to build them. And if these techniques, facilities, and skills were drafted for government service, they would be unavailable to private enterprise.

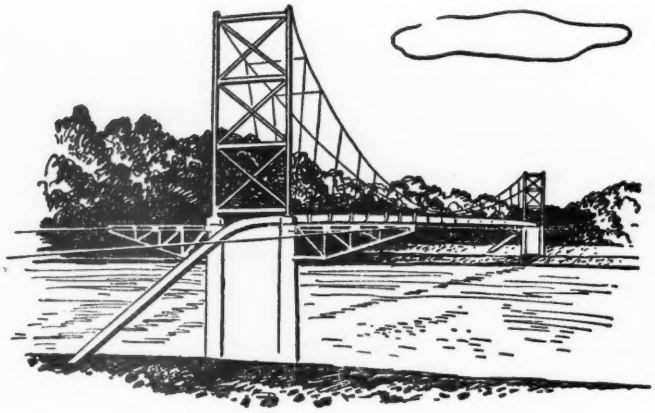
FOR a second thing, as James F. Fairman, vice president of Consolidated Edison Company of New York, told the June, 1956, EEI convention, the private power companies and the manufacturers of their equipment have successfully demonstrated over the years their ability to lick all the problems that have confronted them —development of turbines, of pulverized fuel, of the alternating current networks, of high-tension transmission—and that "the competitive electric power from the atom cannot be forced in a hothouse atmosphere of government funds."

FINALLY, development of nuclear power reactors is a field in which the time-tested method of trial and error would insure the highest degree of success. If development of nuclear power is to reach its full potential and its costs are to be brought into line with, or under, those of conventional fuels, the inventiveness and ingenuity of the many thousands of research departments and laboratories of our large manufacturers, working under a profit motive, would stand a better chance of reaching the desired goal than experts under the direction of politicians and public power promoters.

If private enterprise is permitted full and unhampered sway in development of nuclear power reactors, we can be certain it will be done with relative speed and efficiency, and that the United States will retain its leadership in the peacetime use of the atom.

"THE purpose of government is to serve, never to dominate. There has never been a better, clearer explanation of this principle than one I have often quoted from Abraham Lincoln. 'The legitimate object of government,' he said, 'is to do for a community of people whatever they need to have done, but cannot do, at all, or cannot so well do, for themselves—in their separate and individual capacities. But in all that people can individually do as well for themselves, government ought not to interfere.'"

—DWIGHT D. EISENHOWER,
President of the United States.



The Natural Gas Industry and Our American Society

The veto by President Eisenhower, earlier this year, of legislation to exempt independent natural gas producers from Federal Power Commission jurisdiction has by no means solved problems which that measure sought to remedy.

By WILLIAM PLUNKETT*

THERE has never been a time in our history when an industry has been faced with a problem of such broad national importance as the one now facing the natural gas industry. How the top managements of the three major groups in the industry meet this problem will have a profound effect upon our industrial, political, and social economy for many years to come. For this reason, if for no other, the issues with which the natural gas industry is faced indubitably must become the concern of thoughtful men of management in every field of business.

The recent arguments for and against the Harris Bill seeking to amend the Natural Gas Act of 1938 appear inconclusive. Although the President's veto of the bill favored its opponents, his comments at the time as to the need for clarifying legislation leave the situation as confused as before. Can this confusion be ignored by those in the gas industry and in so doing serve their best interests? Upon what basic concept should clarifying legislation be written? What are the issues involved? What group or individual in the industry should take the initial step in its formulation? What tactics may be helpfully employed?

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The answers to these questions rest upon a broad understanding of the natural gas industry itself and its impact upon our industrial, social, and political economy.

The following is directed toward presenting a perspective of the industry and to suggesting possible answers to the foregoing and other corollary questions:

Public Service Companies

THESE companies, differentiated from the ones that are municipally owned and operated, function as legal monopolies under the jurisdiction of a regulatory agency, frequently a state commission. Although privately owned legal monopolies, they are at the same time competitors with the marketers of fuel oil and other industrial and domestic fuels. The industrial market (interruptible service) has an additional advantage as it provides a means of equating the variable load factor of the domestic and commercial consumers with available supplies. This is particularly important to those companies having little or no available underground storage. In another respect, the public service company is in a competitive position; namely, in the money market. If it is to offer attraction to the bond and/or stock buyer, it must show an earning power comparable to that in other lines of industry having similar risks. Whatever may be the advantages of its legal position, the privately operated gas utility can only serve and grow in an economic atmosphere that is favorable to all private industry.

Presently and for many years past it has been generally accepted that the state utility commissions perform a needed function in exercising control over the rates, service, safety, and financial health of a legally created monopoly—a control which competition performs in unregulated industries.

In those rate hearings before a utility commission that have been observed, they appeared costly in both time and money.

GENERALLY speaking, there is a considerable time lag between the time a rate application is made and the time it is either granted, refused, or adjusted by the commission. This time lag tends to decrease the flexibility of management in meeting increasing costs of operation or adjusting to other economic changes. The result is that there are times when, before the rate is approved, the company is under the necessity of applying for further rate increases or adjustments.

Another factor tending to make rate hearings costly and cumbersome is that there is ever present, even in the most high-minded commission and its staff, the particular economic and political philosophy of the commissioners and staff members which tends to color the proceedings. Part of this is due to the fact that rate procedure requires open hearings which are subject to interruption by others having a trivial interest. Often these interruptions are not only irrelevant but also inject controversial issues. On occasion these are pursued with time-consuming vigor.

It is suggested that an improvement of this situation might be accomplished through the overhaul and refinement of what has been known as the "Washington Plan." This received a trial a number of years ago. It might be possible to combine elements of this procedure with the one that was in successful use in England a number of years ago. Certainly the time

and cost savings possible from such a plan justify a comprehensive joint study by the utility and its respective commission.[1] More on this subject is said later.

Superficially at least, it may appear that the public service companies would be benefited by federal regulation of natural gas at point of origin. To those who take the view that without regulation pipeline companies and gas distributors are "captive buyers," federal control appears an end to be greatly desired. On the other hand, if pipeline companies and distributors are released as "captive buyers," do not the producers become "captive sellers"?

It is essential that a very careful appraisal be made of these points by top management in each segment of the industry. Such appraisal should cover a full and objective consideration as to the possible repercussion of federal regulation upon the industrial economy as a whole. This particularly in regard to the extent to which the sphere of regulation may eventually destroy the economic atmosphere necessary to the health of the privately operated utility, to industry in general, and the public they serve.

[1] *Editor's note:* The Washington Plan was a rate-fixing device based on an agreed rate base and an automatic sliding scale, profit-sharing arrangement, whereby the utility would "share" earnings in excess of a given rate of return with its customers in the form of pro rata rate reductions. In event of a deficiency the "loss" was also supposed to be "shared" in the rate increases. It was very successfully applied to the Potomac Electric Power Company, under an agreement with the District of Columbia Public Utilities Commission starting in 1924 until World War II. It was abandoned, however, in the face of resistance to implied rate increases not only as to the Potomac Company but also the Washington Gas Light Company.

The Pipeline Companies

THESE companies may be said to be the middlemen in the natural gas industry. On one hand they are dependent upon their suppliers, the natural gas producers, for a continuous and adequate supply of gas and on the other hand they are dependent upon the marketing skill and efficiency of the public service companies. It is only as the producers and the public service companies can preserve a favorable economic atmosphere in which to operate that the pipeline companies can successfully survive. In this, all three have a fundamental mutuality of interests. This principle must be basic to any natural gas legislation at either national or state level.

Federal control of companies in interstate commerce is generally accepted. The Federal Power Commission as the regulatory authority for the pipeline companies has now the authority to regulate the price

"THERE *has never been a time in our history when an industry has been faced with a problem of such broad national importance as the one now facing the natural gas industry. How the top managements of the three major groups in the industry meet this problem will have a profound effect upon our industrial, political, and social economy for many years to come. For this reason, if for no other, the issues with which the natural gas industry is faced indubitably must become the concern of thoughtful men of management in every field of business.*"

of gas sold in the field of origin. In the minds of many there is a question as to whether this is necessary.

The Federal Power Commission has used the phrase "fair field prices" as the basis for determining the price of gas sold by the producers to the pipeline companies for interstate transportation. President Eisenhower used the words "fair prices" in his veto message. As a matter of semantics the question arises as to "fair" —for whom and how may it be determined?

THE price of gas to the producer is conditioned by a number of factors: the price that may be obtained in some other market, the cost of discovery, the quality of the gas, and its value as a repressuring agent in oil fields. This latter is of considerable importance.

The price of gas the pipeline company can afford to pay is conditioned upon an adequate return on the capital invested and one which when added to transport and service costs will be in line with the public service company's ability to pay.

The price of gas to the public service company is one which permits consumer rates at competitive levels with other fuels, and provides the customers (domestic and industrial) with a prime fuel within their willingness to pay.

The major factors in the cost of gas to the consumer lie in the cost of transport and service. The cost of gas at point of origin is only a fraction of the total cost to the ultimate consumer. Natural gas has historically been sold by the producers at prices below its value as a prime fuel and its value as an essential agent in the recovery of crude oil.

If the FPC is to regulate the field price of gas, this will probably subject the pipeline companies to a greater time lag before final determination. It is understood that even under present conditions the FPC is behind some three years in certain cases before it. In some instances in order to meet this situation, temporary approval is given by the FPC pending final determination. (This form of relief has not, so far as is known, been given to the public service companies by any state regulatory commission in rate cases before them.) To purchase gas from the producers requires more flexibility on the part of the pipeline companies than appears now possible under the FPC.

It is suggested that it would be helpful if someone at top level in one or more of the pipeline companies would initiate a high-level exploration directed to a complete analysis of price and markets from point of origin to the ultimate consumer. With the aid of modern analytical and computing equipment, plus the co-operation of one or more of the major gas producers and one or more of the major public service companies, this would be possible. The results would justify the expense if for no other reason than giving each one a better understanding of the other's position. This does not imply that any one of them would give up a free bargaining position but rather that a sounder basis for doing business with each other would be established.

From this procedure, in addition to the one suggested for the public service companies, might well come the answers to the questions asked in the first paragraph of this article.

Gas Producers

THE oil industry is a major supplier of units of heat and energy and other

Broader Vision for Management

"TOP men of business have, generally, been reticent in expressing themselves on matters other than those directly concerned with their respective businesses. The time has come when appraisal and discussion of nonmaterial matters are of equal and tangible importance to the enlightened self-interest of management. There is no better illustration afforded than the situation now facing the natural gas industry. Fear and suspicion exist within the industry. Larger segments in the industry are viewed with distrust by the smaller; governmental regulation is considered by some as the answer to the present problem and by others as an answer which will only do violence to the freedom of the market place."

products essential to our industrial and domestic economy: gasoline, solvents, diesel oil, fuel oil, petroleum coke, light petroleum gases, natural gas, raw materials for agricultural and pharmaceutical products, and other hydrocarbon derivatives from a barrel of crude oil. Natural gas is only one of many hydrocarbon forms made available by the oil industry for essential uses. The prime economic utilization of oil well gas (that recovered in association with crude oil) is first as a plant and field fuel and as a repressuring agent in securing a greater percentage of crude oil from a given field. Those volumes in excess of that required in these utilizations are available for sale to the pipeline companies and gas utility companies or to industrial plants adjacent to producing fields.

THE principal, but not necessarily the sole, market for "dry" gas (natural gas occurring by itself) is the pipeline companies and/or local public utility compa-

nies, together with such industrial gas users as may be adjacent to producing fields.

The economic climate required by the producers is conditioned by wide and sometimes rapidly changing economic cycles and markets both national and worldwide; the vicissitudes of fortune in the continual search for new reserves of oil and gas; the capital demands arising from the necessity to provide expanding facilities to meet market demands and the employment of new techniques.

THE gas producers and the pipeline companies, together with their customers, have a mutuality of interest as suppliers and marketers. Not the least of this community of interest is the fact that both require the same economic atmosphere. The difficulties between them arise from the fact that the oil industry is a nonregulated industry, whereas the pipeline companies and the public service companies are regulated.

At some point these differences can be bridged so that the producers retain adequate freedom of bargaining and the pipeline companies and their customers secure protection from the possibility of too rapid or extensive increases in field prices.

The same procedure as suggested to the pipeline companies in respect to co-operative exploratory studies applies in finding a common meeting ground in respect to pricing.

Federal Power Commission

IF the Federal Power Commission is to determine the "fair field price" of gas sold the pipeline companies, the cost, time, and personnel requirements become colossal. A major reason for this is that the physical characteristics and pressures of natural gas vary from one field to another. Thus the price that would be equitable to the supplier in one field might be entirely unfair for another. Gas delivered to the pipeline companies is gathered from a number of producing areas. The task of "pricing" this gas requires engineering staffs, accountants, and others to an extent that it will be difficult to find adequate personnel. Cost of discovery is a most important item in pricing.

The regulatory task facing the Federal Power Commission is indeed a formidable one.

Additional difficulty arises because nonregulatory market prices will diminish in number and the accounting procedures used in this country do not yet include a satisfactory method for computing "cost" with our fluctuating monetary unit.

A further difficulty arises in that FPC regulations will tend to force the producers to more vigorous search for industrial markets within the state of origin.

The explorations suggested in the foregoing may, after they are once started, be informally carried through with the FPC.

State Public Utility Commissions

THESE commissions have deep responsibilities. Many of them are overstaffed and probably an equal number have more than they can do.

The explorations which have been suggested would, if successful, materially assist them in the performance of their functions.

The cost of hearings before the commission must be borne by taxes or as a part of the consumer's gas rate. This in itself is a persuasive reason for undertaking an objective and co-operative reappraisal of present rate procedures.

Subjects for Exploratory Study

THE foregoing indicates three avenues for exploratory study. They are:

1. A joint study by one or more major pipeline companies and a like number of major gas producers to determine
   (a) the possibility of developing a mechanical or other means for expressing factors entering into the market price of gas from point of origin to the ultimate consumer.
   (b) A workable concept within which bargaining between producers and pipeline companies may continue giving the producers the necessary freedom of the market place and at the same time assure pipeline companies and public service companies that field prices of gas will be contained within the economic limits of their respective markets.
2. A study by one or two of the major pipeline companies in which the FPC is asked to assist in determining the possibility of using available automatic computers, assisting and shortening the time of negotiation on applications brought before them.
3. A vigorous and sincere effort on the part of two or more of the leading public service companies to simplify and shorten rate-making procedure with their respective public utility commissions.

Major Objectives of Exploratory Studies

NATURAL gas is a valuable natural resource. It is an important agent in recovery of crude oil and is also a prime fuel. Its production, transportation, and ultimate utilization have an important effect upon our industrial, social, and political economy. It is most important to the economic and corporate health of industry, the producers, the pipeline companies, and the public service companies, that the movement of gas from point of origin to point of use is based upon full recognition of the responsibilities of the industry collectively and severally. This is the major objective. The others are corollary to it:

To determine the character and extent of clarifying legislation; to improve the position of the major groups at interest in reducing costs; and to find an adequate answer to those who exhibit a distrust of the natural gas industry as a whole or toward one or more of its segments.

Initiating Exploratory Studies

THE matters discussed herein are of equal importance to each of the major groups having a part in the production, transportation, and marketing of natural gas. Each group is dependent upon the other and collectively they are dependent upon maintaining and improving the economic and social atmosphere in which they, their stockholders, and the public they serve must live.

These studies represent a co-operative task. In such a task a focal point is needed. In this instance two things are required. First is for someone at the highest level of management in any one of the groups involved to assume the responsibility of leadership. Second is for someone in an objective position outside the industry to act as co-ordinator, assistant, and intermediary. Between them a strategic plan of approach can be developed. Form this point it would be the task of the assistant to informally discuss the project with those

essential to its prosecution. All discussion would be kept at a high level of management upon the understanding of complete informality and that no commitments as to future participation are asked until a meeting of minds as to procedure has been reached.

In the initial stage the discussions should be highly confidential and only men of like minds approached. As the studies developed the discussions could be broadened and subsequent strategy devised.

It might be said to those who may be skeptical of the practicality of this suggestion that in one instance not unrelated to the natural gas industry this procedure was most successfully employed.

Top men of business have, generally, been reticent in expressing themselves on matters other than those directly concerned with their respective businesses. The time has come when appraisal and discussion of nonmaterial matters are of equal and tangible importance to the enlightened self-interest of management. There is no better illustration afforded than the situation now facing the natural gas industry.

Fear and suspicion exist within the industry. Larger segments in the industry are viewed with distrust by the smaller; governmental regulation is considered by some as the answer to the present problem and by others as an answer which will only do violence to the freedom of the market place. The result—confusion, name calling, and controversies based on emotional, historical prejudice having little relation to present realities.

No sound legislation can be conceived in such an atmosphere. The answer to sound legislation lies in a forthright facing of the issues involved. How this may be done has been suggested in the foregoing:

1. The initiation of an objective high-level appraisal of the industry—this to stem from a recognized leader from top-level management, either someone in one of the segments of the industry or some generally recognized individual of similar qualities in an outside industry, together with an assistant who would also function as a director, co-ordinator, and intermediary. The major qualification for this post would be an objective outside point of view based on an experienced understanding of the respective position and problems of each of the three segments in the industry.

2. Impartial study of

A. The functions and needs of the three segments of the industry and their relationship to our whole economy.

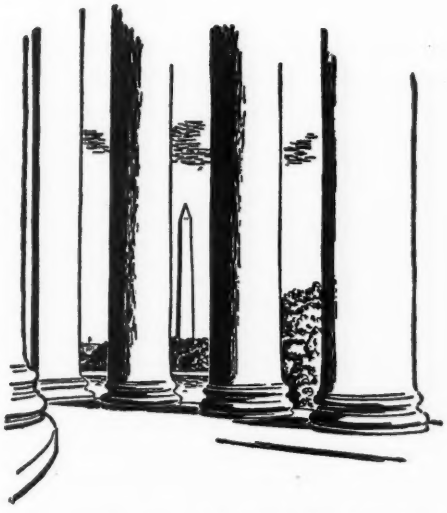
B. The factors inherent to gas prices from point of origin to ultimate consumer.

C. Rate-making procedure.

The underlying concept prompting this article is succinctly expressed by Thomas C. Cochran, author of "Business and the Democratic Tradition," *Harvard Business Review,* March-April, 1956:

> It (business) must certainly work at making its own internal operations reflect more adequately the democratic ideals we want to communicate abroad. A more basic problem, perhaps the same one which confronts all other segments of American society, is the need for reanalysis and rearticulation of the ideals and values we want the rest of the world to accept.

Washington and the Utilities



Cleaning Up after Congress

WITHIN the constitutional "ten days" after Congress adjourned, President Eisenhower took action on a number of bills of interest to public utilities. His most important action along this line was a negative one. He vetoed a bill passed by the Democratic 84th Congress over Republican opposition which would have frozen the wholesale rates charged for electricity by the Southwestern Power Administration.

Although there was an earlier report suggesting that SPA rates were too low to be compensatory and should be jacked up, it was generally assumed that SPA would not have boosted the rates, anyhow, for various reasons until congressional committees had a chance to look at them again. But the Democrats professed to fear that rates would be hiked as soon as Congress quit. And so the bill (S 3338) was passed to block any increase until July 1, 1957.

This apparently offended the President's very definite ideas as to the proper separation of powers between Congress and the executive branch. In his veto message the President said that sound management requires that the federal government fix rates from federal projects which will return the taxpayers' investment, with interest, within a reasonable time.

While this does not mean, as a practical matter, that SPA rates will be raised in the near future, it indicates that eventually SPA rates will be overhauled so as to bring them into line with rising operating costs. It could happen later this year or early next. Meanwhile, the White House will not stand for having its administrative hands tied by congressional apron strings.

ASSISTANT Interior Secretary Fred A. Aandahl said on the same day the bill was vetoed (August 8th) that the department has approved a contract for the SPA to sell power to Bentonville, Arkansas. The contract, effective on July 1, 1957, calls for SPA to sell 2,000 kilowatts of power to Bentonville. Aandahl said the problem now is to determine the most efficient and dependable method of delivery.

Southwestern Gas & Electric Power Company is now supplying Bentonville with power, but the contract expires July

1st. Southwestern Gas has offered to transmit SPA power to Bentonville over its lines. This offer is being studied, Aandahl said.

The President acted favorably on two bills of interest to telephone companies. He signed the bill (HR 7536) requiring coastal vessels carrying six or more passengers for hire to be equipped with radiotelephone sets. Also signed into law was the bill (S 1456) making certain simplifications in Federal Communications Act procedures.

The President gave his reluctant approval to a bill (HR 5881) authorizing a program of federal assistance to nonfederal agencies in building small irrigation projects under reclamation law. The President regretted a provision giving congressional committees power to veto administration-approved loans. The bill contains a preference clause provision for any power produced.

Another bill (S 3658) which became law this month authorizes agreements for the subsurface storage of oil or gas on Indian lands. Previous law did not permit such leases except during the term of a lease for actual production of oil or gas.

Rivers and Harbors Bill

PRESIDENT Eisenhower also vetoed a $1.6 billion rivers and harbors bill on grounds that Congress acted on "incompleted information" about many of the measure's projects. In an unusual election-year action, the President withheld approval from the bill which covered 99 projects and 14 river basin improvements scattered virtually all over the United States.

The President said he regretted having to veto the bill. But he noted that the bill only authorized projects and that the next Congress would have had to decide whether to provide the money for them. So he said his veto need "cause no delay" in starting many worth-while projects in the bill. Mr. Eisenhower said some projects in the bill involved too little local participation. He said the "best test yet devised" for insuring that a project is sound is the willingness of local people to invest their own money. But his major complaint was that Congress acted on too many of the projects without getting complete reports on them from the Corps of Engineers.

He said Congress failed to get a review from the Army Engineers or an opinion from affected states for 32 projects in the bill. These projects involved more than $530,000,000. "Without such review the Congress must necessarily have acted on the basis of incomplete information," the President said. He quoted § 202 of the River and Harbor and Flood Control Act of 1954 which declared it to be the policy of Congress that "no project . . . shall be authorized by the Congress unless a report . . . has been previously submitted by the Chief of Engineers . . . in conformity with existing law."

HE said the Chief of Engineers has not studied or reported on some of the projects and in a few cases field studies have not yet been received. The President said, "I regard this as being a wise policy, and I believe that it is very unfortunate that this traditional statement was not followed." Mr. Eisenhower said that in the weeks before Congress next meets a "careful, orderly review" will be undertaken of the projects in the bill which have not been fully studied or reviewed to date. He said this should enable the Congress to base its action on a full knowledge of all the facts involved.

Mr. Eisenhower said that while the majority of the projects in the bill have been given "adequate" study and review, there are still a large number which have not.

He said this makes it impossible to determine "whether their authorization would be in the public interest." Still others, he said, have been found after review not to be in the public interest. He apparently referred to some projects against which the Corps of Engineers recommended.

The Michigan Atom Plant

CONSTRUCTION of the world's first large "breeder" reactor, transmuting into light and power the energy released by splitting the uranium atom, was started on August 8th.

Walker L. Cisler, president of the Detroit Edison Company, and also president of the Power Reactor Development Company, a group of 14 widely scattered public utilities and three manufacturing enterprises, said the ground-breaking ceremony culminated four years of research and experimentation. Nearly $10,000,000 has been spent on what he termed a "pioneering venture," with a total cost expected to exceed $54,000,000.

Site of the power plant is Lagoona Beach, a 900-acre stretch of marsh land seven miles north of Monroe and 30 miles south of Detroit. Permission for construction of the atomic-electric plant was granted on August 4th by the Atomic Energy Commission over the protests of one member who charged that it would constitute a public hazard. Cisler and his associates expressed confidence that safeguards built into the reactor design will satisfy all requirements of the AEC.

He voiced the virtual certainty that the AEC will take the second step in supplying the necessary four tons of fissionable uranium and granting authority for operation of the plant, scheduled to start in December, 1959. A year of low-level operation is planned before reaching the rated capacity of 150,000 kilowatts. Cisler emphasized that the output of the installation will be only a fractional supplement to the 7,000,000 kilowatts of electricity which will be generated to supply Michigan's needs by 1960.

LEWIS L. STRAUSS, chairman of the AEC, was the principal speaker at the ceremony. Of the five major types of nuclear power reactors, the "fast neutron breeder reactor" early won the support of the Detroit Edison Company and its associates. It is characterized by the fact that it makes fullest use of the rare fissionable fuel and, at the same time, actually "breeds" plutonium, a man-made fuel. This is accomplished by blanketing the core element with uranium in such manner as to capture the high-speed radioactive particles.

Cisler recalled that the Italian-American physicist, Enrico Fermi—who was responsible for the first controlled chain reaction that led to the perfection of the atomic bomb—predicted more than a decade ago that the first nation to develop a breeder reactor would lead in the peaceful application of nuclear energy.

Physicists and engineers responsible for the reactor design reiterated that all competent authorities were well satisfied with its safety features. All radioactive materials are to be contained within a sealed steel and concrete dome. The concentration, at full power, will be only one-eighth as great as that of the Hiroshima bomb, it was said. An explosion was held to be an impossibility. All contaminated wastes are to be held in pools for later disposition.

Arthur S. Griswold, assistant to Cisler, asserted that if all controls and safety devices failed, the reactor would shut itself off automatically. He added that, in contrast to the reactor being constructed at Shippingport, Pennsylvania, in a densely populated area, that at Monroe would

be more than 3,500 feet from the nearest dwelling.

Representative Chet Holifield (Democrat, California), a member of the Joint Congressional Committee on Atomic Energy, said he had telegraphed to President Eisenhower urging him to reverse the commission and block construction of the plant. The Californian said the proposed plant would menace the lives of thousands of people in neighboring communities.

At a news conference, Mr. Holifield said he had joined with Senator Clinton P. Anderson (Democrat, New Mexico) in an appeal to Governor G. Mennen Williams of Michigan to take what legal action he could to block construction of the plant. In a telegram sent on August 4th he had advised Governor Williams that the commission had issued the permit as a result of a "star chamber" proceeding in which the report of its advisory committee that "raised grave doubts as to the safety of the reactor" had been disregarded. Holifield asserted that there was great danger of "melt down" (the building up of heat of such intensity as to dissolve the heating elements upon which the operation depends) that would release radioactive elements into the atmosphere, rivers, and lakes near the station.

Reverse "Give-away" Charge

Representative A. L. Miller (Republican, Nebraska) called for a review of some of the federal power contracts made with private firms during the Truman administration. Referring to contracts involving Pacific Northwest and Southwestern Power Administration electricity, Miller said in a statement:

> It does seem that all of these contracts should be reviewed and if there is any way possible, rates ought to be established that would reflect sound business principles.

Noting that much has been said about "giveaway" of natural resources, Miller said that he had examined contracts entered into by the Truman administration for federal power for private industrial groups. "The record shows that in the Pacific Northwest nearly half of the federal power goes to private groups at around two mills a kilowatt-hour. This is less than the cost of production. Some of the power is sold as cheap as one mill," he said. Miller said that in the Southwestern Power Administration area an aluminum company takes about half the power, "which they call secondary power, for 1.25 mills a kilowatt-hour." He said the REA's in this district pay 5.4 mills. He stated:

> No provision is made to give preference customers like the REA's and municipalities any of this cheap power. They must pay from three to seven times as much for the same power that now goes to private groups.

Miller said that aluminum companies should not get federal power at less than cost and that there should be withdrawal clauses so that preference customers could get power when they need it. Under law, preference in allocation of federal power goes to public bodies, such as REA's and municipalities. Miller said:

> One of the greatest power giveaways of all time occurred under the Truman administration when (Oscar) Chapman (Secretary of the Interior) and (Mike) Straus (Bureau of Reclamation commissioner) were in the Interior Department. They entered into contracts for many millions of kilowatts of federal power that was sold to private groups at less than the cost of production. That in my book is a giveaway.

Telephone and Telegraph

Paging Service

THE full Federal Communications Commission will probably have to decide whether the Bell Telephone Company of Pennsylvania can enter the radio-paging service field over the protest of a commercial radio specialist pioneering in that field in the Allentown-Bethlehem area. In August, 1955, Richard E. Law, licensed operator of a one-way signaling station in Allentown, Pennsylvania, protested against an application filed by the Bell Telephone Company of Pennsylvania. Law's service is designed to serve parties such as physicians who have a special need for a portable device for emergency paging service.

Law's service, however, permits the subscriber to respond (via radio) to a code message. The arrangement is similar to ordinary taxicab radio dispatching. The Bell Telephone Company, on the other hand, proposes to serve its paging subscribers through a pocket-type receiving device which is actuated via radio but which merely lets the subscriber know that he should go to the nearest telephone to complete the call. The Bell company application was for permission to construct two base transmitters in the Allentown-Bethlehem area, ostensibly as a supplement to its regular telephone service.

In an opinion written July 6, 1956, FCC Examiner Donahue upheld the right of the Bell company to engage in such radio-paging service. It was admitted by the telephone company to be "developmental." The Allentown-Bethlehem region was selected as a try-out area. The examiner found that "The service it (Bell) proposes is a logical extension of its telephone service for it holds promise of increasing its ratio of completed telephone calls, certainly a desirable step from the standpoint of public interest." He found no evidence that "unlawful monopoly will result" or of "predatory intent." Exceptions have been filed, however, to Donahue's decision, which would have otherwise become final. This means that the matter will have to be reviewed and finally decided by the full FCC.

Consent Decree Files

THE Justice Department has refused to furnish a congressional committee files relating to settlement of its anti-trust case against the American Telephone and Telegraph Company and its subsidiary, Western Electric Company. Chairman Celler (Democrat, New York) of the House Judiciary Committee said, shortly after the adjournment of Congress, he requested the files because a subcommittee study "indicates that further and more de-

tailed inquiry into all the circumstances surrounding the settlement of this case is appropriate."

Celler made public a letter from Deputy Attorney General Rogers declining the request on the grounds of "presidential privilege" and the claim that such action "would violate the confidential nature of settlement negotiations." Rogers said it also would "discourage defendants, present and future, from entering into such negotiations," and that department policy "does not permit disclosure of staff memoranda or recommendations."

Representative Roosevelt (Democrat, California) on August 5th said that conflict of interest among highly placed government officials may have "illegally tainted" settlement of an antitrust suit against the AT&T. Roosevelt's statement was in a letter to President Eisenhower, in which he asked that Attorney General Brownell be directed "to make a complete and honest disclosure to Congress of all the facts." A House Small Business subcommittee, headed by Roosevelt, last April accused Brownell of giving AT&T "favored and special treatment," and listed 29 officials of the company or its subsidiaries "who have held policy-making and influential positions" in the government.

In his letter to Mr. Eisenhower, Roosevelt asserted the AT&T consent decree settlement "may be illegally tainted with a conflict of interest resulting from action taken by certain highly placed government officials who were also officers of or affiliated with AT&T or its subsidiaries."

REA Loan Delinquency

REA has conceded an increase in the amount of dollar delinquency in repayment of telephone loans, though the amount of payments, ahead of schedule, had increased. As of June 30th, end of fiscal 1956, 374 telephone system borrowers had received advances of loan funds aggregating $153,800,000. Of these borrowers, 28 were more than thirty days overdue in payments aggregating $553,623. This marks a minor change in the number of borrowers in arrears, but an increase in the dollar amount overdue.

A year ago, 29 borrowers were delinquent in the total amount of $512,266. Currently, 19 telephone borrowers are $186,294 ahead of schedule in their payments. A year ago, only seven such borrowers had paid $13,757 in advance. During the past fiscal year, repayments of principal by telephone borrowers approximated $1,200,000, and interest payments were $929,000.

Governor Defies FCC

GOVERNOR Edwin C. Johnson (Democrat) of Colorado recently issued an executive order defying the Federal Communications Commission in its refusal to allow a Steamboat Springs, Colorado, appliance dealer to boost a Denver television signal into this mountain-rimmed community of 2,000 inhabitants. The governor's order appointed the businessman, W. R. Webber, to Johnson's "official communications staff" and directed him to "continue to serve the people of Steamboat Springs without charge by boosting 'on channel' the TV signal of KOA-TV."

Governor Johnson said he feels his action may cause Colorado to become a testing ground of "the arbitrary and incomprehensible action of the FCC to deny entertainment and education to people in isolated areas." He said it may lead to extension of television to other remote areas in Colorado as well as in other states if the same procedures are followed.

Financial News and Comment

By OWEN ELY

Money Rates up Again, Bonds Weaken

GOVERNMENT long-term bond yields serve as a good index of money rates and bond prices. In January yields dropped moderately, but during February-April advanced sharply. From mid-April to mid-June yields again declined—not, however, reaching the February low — but since mid-June they have again advanced to new high levels for this year; correspondingly, bond prices have dropped. The chart on page 322 from the "Monthly Review" of the Federal Reserve Bank of New York shows the action of principal security groups in 1955-56, through July. The municipal bond market has been hard hit, with the Dow-Jones monthly average of twenty 20-year bonds losing all the ground recovered since the April decline; however, thus far the rise in yields and decline in prices has not been as severe as occurred in the first half of 1953.

Referring to the table of July utility security offerings on page 323, it will be noted that four out of six bond offerings sold slowly. Big institutional lenders have been reported somewhat indifferent to recent offerings because of the possibility that large industrial firms — Ford and Sears, Roebuck have been mentioned — may soon be in the market for substantial funds either on a private or public basis.

DESPITE declining bond prices, however, the calendar of new issues in the week beginning August 13th showed unusual August activity, with seven issues aggregating $191,000,000 scheduled for offering. The list included two important utility issues—about 60,000,000 Detroit Edison convertible debentures and $40,000,000 Consumers Power bonds. As we go to press it is reported that Consumers Power has paid almost 4 per cent for its funds—the highest rate for an Aaa bond issue since the early 1930's. This month Pacific Telephone & Telegraph was scheduled to offer $78,000,000 debentures at competitive bidding. Southern California Edison, however, has decided to substitute common stock for the $40,000,000 mortgage bond issue which had been scheduled for bidding September 5th. In-

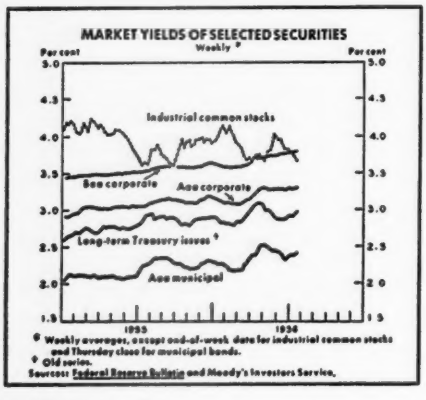
DEPARTMENT INDEX

stead, it will sell 500,000 shares of common stock to raise about $26,000,000, and will seek to exempt the issue from competitive bidding.

In the week ended about August 14th, the Treasury bill rate climbed from 2.399 per cent to 2.603 per cent. Yields on commercial paper were raised one-eighth point to the 3⅛-3¼ per cent level, and money is again reported "tight" in commercial banking circles. The banks have been selling governments quite steadily for over a year and a half, putting the funds into business loans (recently 21 per cent over last year) and their own borrowings have also shown an irregular upward trend. *The New York Times* stated editorially on August 14th, "bankers are bracing themselves for even tighter conditions that are likely to have a sharp impact on the money market." It is rumored that the prime money rate will be increased soon, possibly to 4 per cent. Around September 15th corporations will again need some income tax funds, and seasonal demands may also increase.

Of course the Federal Reserve Board holds the keys to the money market. The Reserve is concerned about the possible inflationary effects of the current round of wage and commodity increases, led off by the steel industry. Hence the Reserve will probably be somewhat slow or niggardly in alleviating any money market difficulties—since it does not want to encourage unnecessary increases in business loans. However, the banks feel that their first function is to loan to business, and New York city banks may divert some brokers' loans to interior banks.

According to a recent survey by Standard Factors Corp. most of the big city banks at present have 50-67 per cent of their deposits out on loan, so that "under Federal Reserve Board regulations there is hardly room for any more loans unless the board acts to ease credit." Some bankers were reported inquiring "how it will be possible to achieve a $500 billion economy by 1965, as the President has asked, if the money supply is to be rationed at a level barely adequate to support a gross national product of $400 billion."



Who Is the "Average" Stockholder?—A New Census

The New York Stock Exchange recently published the results of a 1956 analysis of share ownership—the most comprehensive since the Brookings Institution study in 1952. It was based on new sampling techniques developed by the Stock Exchange in collaboration with Alfred Politz Research, Inc. President Funston remarked:

> The census findings tell the story of vast economic changes that have altered America. None of these changes is more significant than the emergence of a democratic "People's Capitalism." The spread of corporate ownership among additional millions of people willing to

undertake the risks of stock investments —in return for the rewards—is not only a measure of the country's economic vitality, but an indication that the goals of the future, which will require enormous quantities of risk capital, can be achieved.

The Stock Exchange estimated that over 100,000,000 people are indirect share owners through their savings in life insurance companies, pension funds, mutual savings banks, and other financial institutions that invest part of their funds in equity securities. At the end of 1955 8,600,000 people individually owned shares of publicly owned companies (the average stockholder owning 4¼ different issues) while 1,400,000 held shares in privately held, family-type companies. The statistics which follow apply only to adult stockholders in the publicly owned companies. One out of twelve people now own shares compared with one in sixteen four

JULY UTILITY FINANCING

PRINCIPAL PUBLIC OFFERINGS OF ELECTRIC AND GAS UTILITY SECURITIES

Date	*Amount*	*Description*	*Price To Public*	*Underwriting Spread*	*Offering Yield*	*Moody Rating*	*Success of Offering, Etc.*
		Bonds					
7/3	$20.0	Florida Power 1st s.f. 3⅞s 1986	100.98	.71C	3.82%	A	d
7/10	30.0	Tenn. Gas Trans. Deb. s.f. 4½s 1977 ..	100.00	1.25N	4.50	Baa	a
7/17	5.0	Atlanta Gas Light 1st s.f. 4s 1981	101.58	.82C	3.90	A	d
7/18	40.0	Union Electric 1st 3⅞s 1986	102.37	.73C	3.62	Aa	d
7/25	20.0	Illinois Power 1st 3⅜s 1986	100.90	.60C	3.70	Aa	d
8/1	10.0	Jersey Central P. & L. 1st 4⅛s 1986 ..	102.17	.60C	4.00	A	a
		Preferred Stocks					
7/26	14.8	No. Ind. Pub. Ser. Conv. Junior 4.40% ($40 Par)	40.00	1.22N	4.40	—	f
						Earns.-Price Ratio	
		Common Stock—Offered by Subscription					
7/12	2.3	Atlanta Gas Light	25.50	.30N	5.49	10.8	g
7/12	9.2	Pacific Power & Light	27.00	.14	5.48	7.1	h
7/14	.3	Black Hills P. & L.	24.00	—	5.83	9.0	i
		Common Stock—Offered to Public					
7/18	6.3	Kansas Power & Light	23.25	.38N	5.16	8.2	a

C—Competitive. N—Negotiated. a—It is reported that the issue was well received. d—It is reported that the issue sold slowly. f—Offered to stockholders on a 1-for-10 basis. Stock convertible on a share-for-share basis to December 1, 1966. g—Offered to stockholders on a 1-for-10 basis with oversubscription. h—Offered to stockholders on a 1-for-10 basis. i—Offered to stockholders on basis of .04455 shares for 1, with oversubscription. Not underwritten.

Source, Irving Trust Company.

NEW-MONEY ELECTRIC AND GAS UTILITY OFFERINGS IN JULY, 1956 (MILLIONS)

	Offered to Stockholders	*Public Offerings*	*Private Sales*	*Total*
Electric Companies				
Bonds	$ .1	$80.8	$ .4	$81.3
Preferred Stock	14.4	—	5.0	19.4
Common Stock	9.5	6.2	—	15.7
Gas Companies				
Bonds	—	34.7	.6	35.3
Common Stock	2.2	—	—	2.2
	$26.2	$121.7	$6.0	$153.9

Source, Irving Trust Company.

years ago, and 80 per cent of all shareholders own stocks listed on the New York Stock Exchange.

WHAT are the characteristics of the shareholder? For the first time women outnumber men by a margin of 51.6 per cent to 48.4 per cent. However, the men hold more shares than the women, excluding holdings in joint accounts and in brokerage names. Nearly 30 per cent of college graduates own stock, while one out of ten high-school graduates is an owner, and only one out of fifty-nine people whose education ended in grade school. Some 25 per cent of all executives and 20 per cent of all professional people are stockholders. Holders of common stock were classified as follows in order of importance:

Housewives and nonemployed females	34%
Clerks and salesmen	18
Proprietors, managers, and officials	14
Professional people	12
Craftsmen and foremen	6
Nonemployed (including retired and dependent persons)	6
Service workers	5
Farmers and farm laborers	3
Operators and laborers	2
	100%

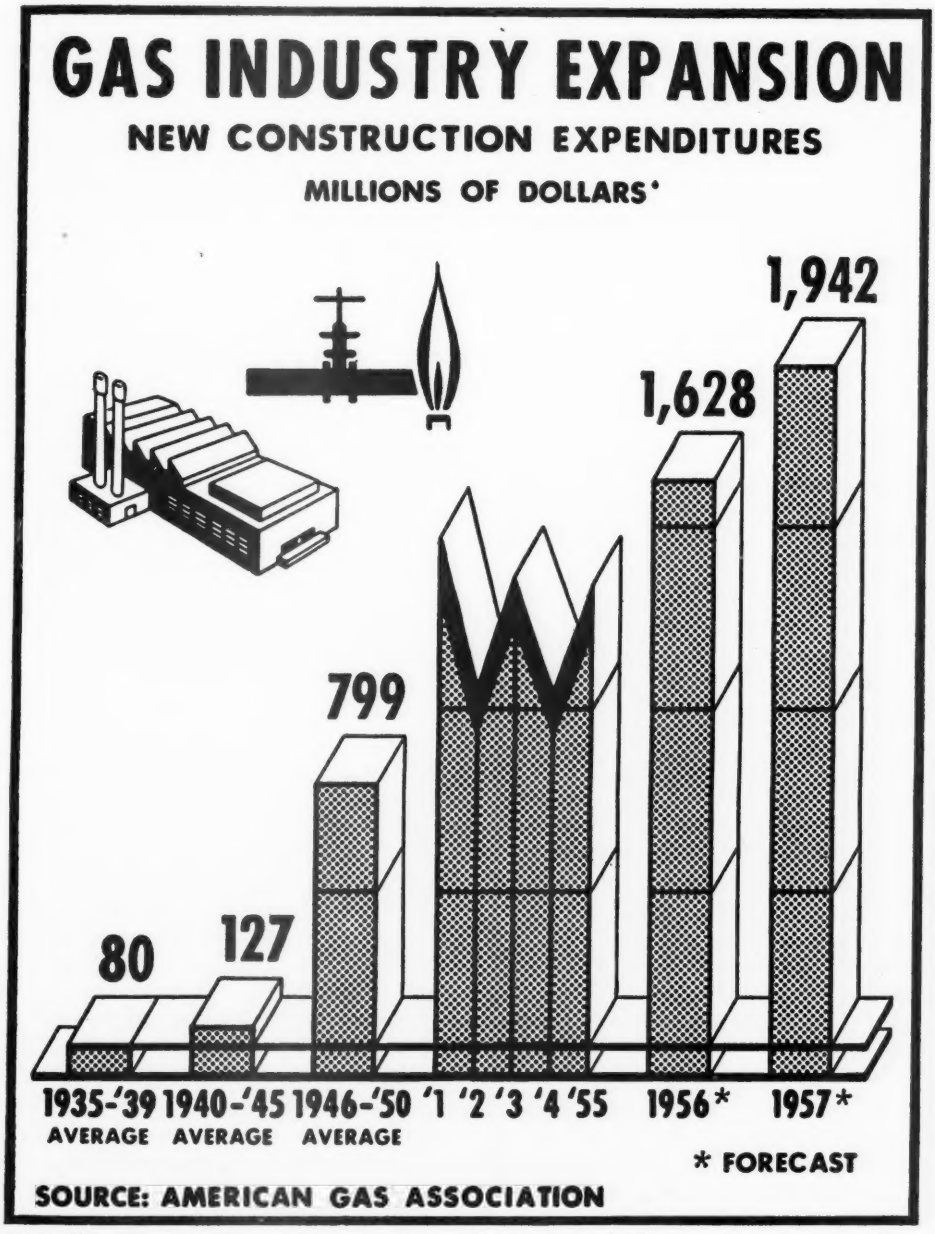
The census revealed for the first time that some 91 per cent of share owners hold stock registered in their own names, the balance being in the names of brokers or bank nominees.

A surprising factor is the low income of some stockholders. Sixty-four per cent have household incomes of less than $7,500, while 36 per cent have larger incomes. The average shareholder is now forty-eight years old—three years younger than in 1952. The "typical" share owner is a high-school graduate and lives in a community of about 25,000. Surprisingly 27 per cent of adult share owners are in the age bracket twenty-one to thirty-four, 36 per cent are thirty-five to fifty-four, 24 per cent fifty-five to sixty-four, and only 13 per cent are sixty-five or over.

THE greatest increase in share ownership in the past four years has been in communities ranging from 2,500 to 25,000. Naturally the states with the largest population, such as New York, California, and Illinois, have the largest number of share owners; but New England has the highest proportion of share owners to population—one out of ten.

Some 4,600 publicly held corporations were covered in the census, with a total of 6,679 common and preferred stock issues. Of nearly 8 billion shares outstanding, only one-quarter billion represented preferred stock. The shares were held by 31,200,000 stockholders of record but, of course, there was considerable duplication since many persons held stocks in more than one company.

Since an earlier census in 1952 the number of shareholders has increased one-third, about half the increase occurring in 1955. The Stock Exchange attributed the sharp gain in 1955 to developments such as the following: the nation's continued economic growth, which has been reflected in generally rising equity values; increased participation in company stock purchase plans; the activities of investment companies; the growing popularity of periodic stock purchase techniques, such as the Monthly Investment Plan; the partial relief from the double tax on corporate dividends granted by Congress in the Revenue Act of 1954; and the enactment of legislation in eight states facilitating the giving of stock gifts to minors. Behind all these factors lie the concerted educational efforts of the Stock Exchange, its community, and many publicly owned companies in bringing about an increased awareness of the risks and rewards of share ownership.



SINCE World War II expansion of the gas industry has averaged a billion dollars per year, or 10 times the rate of pre-war development. As a result of this expansion, an average of 900,000 new customers per year have been added to utility gas lines which now serve more than 29 million users in the United States.

It is unfortunate that the new census did not analyze the stock holdings of the average shareholder, to indicate how many utility shares were held as compared with industrials, rails, banks, investment trusts, etc. The best figures relating to the ownership of utility stocks made available thus far were those compiled by the staff of the Fulbright Committee and published in the committee document "Factors Affecting the Stock Market" in April, 1955, which was reviewed in this department.

Growth Utilities

In the table of electric utility stocks beginning on page 327, a new column has been inserted showing the "Average Increase in Share Earnings 1951-55," expressed as a percentage of the 1951 share earnings. Taking Florida Power Corporation as an example, 1955 earnings were $2.30 compared with $1.29 in 1951. The four-year increase was $1.01 or an average of 25 cents per annum; this divided by $1.29 gives an average annual rate of increase of 19 per cent. While a more refined method would be to calculate the percentage gains for each year and then average the percentages, the other method seems adequate for comparative purposes.

This column may be of interest to security analysts or investors who are interested in ferreting out "growth utilities" which have not been recognized marketwise. The larger well-known growth utilities—principally those in Texas, Florida, and Arizona—sell at much higher multiples of earnings than the nongrowth utilities. They have been especially popular in the last year or so, some of them having shown substantial price gains.

The figures given in the table should not be taken as final evidence, of course. In some cases rate increases and other nonrecurring factors may largely account for the rate of gain in share earnings. In other cases 1951 share earnings were unduly depressed for some reason, resulting in an exaggerated growth percentage. (For example, South Carolina Electric & Gas had a very bad hydro year in 1951.) In still other cases 1955 may have been abnormal. Thus the figures shown in this column are merely in the nature of "clews." They are introduced merely as an initial step toward the study of growth in share earnings, which is an absorbing topic for the analyst and investor.

Of the 135 electric utilities in our domestic list, 126 enjoyed increases in share earnings during 1951-55 while six showed no significant change and three registered declines. The average increase (excluding declines) was 8 per cent; this result gives equal weight to small and large utilities. Taking the composite income statement for all class A and B privately owned electric utilities as published by the EEI, aggregate earnings available for common stock (net income less preferred dividends) increased from $695,000,000 in 1951 to $1,095,000,000 in 1955, an average annual increase of nearly 15 per cent. This, of course, does not make any adjustment for the increase in the number of common shares, as to which no exact information is available. During 1951-54 (1955 figures are not yet available) the par or stated value of all common stock increased at the average annual rate of about 3 per cent. Thus the available evidence seems to indicate that on a weighted basis the average annual gain exceeded 8 per cent—in other words, the large utilities fared better than the small ones.

Part of the increase during this four-year period is probably due to the fact that 1951 was rather a "poor" year earningswise. According to the FPC's 1954 "Statistics of Electric Utilities" (page

XIV) electric utilities earned only 5.6 per cent on average net utility investment in that year compared with 6.9 per cent in 1945 and 1946. The earnings available for common stock, as a percentage of average common equity, were 9.5 per cent in 1951 compared with 10.6 per cent in 1950 and 10.5 per cent in 1954.

COMMON stock earnings reflect various factors such as (1) return on the rate base, (2) the character of new financing, (3) the amount of plowed-back earnings, and (4) reinvested cash available from deferred taxes, etc. Stockholders are entitled to a "normal" rate of growth in earnings of about 3 per cent annually *compounded,* since about 28 cents of every $1 of share earnings is reinvested in the business, with a common stock return of over 10 per cent. But this would be in a "static" economy. The larger average recent gains—8 per cent or more—reflect mainly the dynamic rate of growth plus earnings on invested cash.

General Phone Merger

THE General Telephone Corporation strengthened its position on August 7th as the nation's largest independent (non-Bell) telephone system by merging into its corporate structure the Continental Telephone Company. General formerly had owned 50.49 per cent of the common stock of Continental. The merger was approved by stockholders of both companies at special meetings.

Under terms of the merger, Continental's common stockholders receive seven-eighths of a share of General for each share held. The assets of the surviving company, General Telephone Corporation, pass $1 billion as a result.

DATA ON ELECTRIC UTILITY STOCKS

Rev. (Mill.)			*8/8/56 Price About*	*Dividend Rate*	*Approx. Yield*	*Recent Share Earnings*	*% Increase*	*Aver. Incr. In Sh. Earns. 1951-55*	*Price-Earns. Ratio*	*Div. Payout*	*Approx. Common Stock Equity*
$258	S	American G. & E.	43	$1.44	3.3%	$2.03Je	9%	9%	21.2	71%	34%
39	O	Arizona Pub. Serv.	24	1.00	4.2	1.40Je	5	9	17.1	71	31
10	O	Arkansas Mo. Power	23	1.24	5.4	1.90Ma	10	8	12.1	65	30
27	S	Atlantic City Elec.	30	1.20	4.0	1.53Je	7	10	19.6	78	27
118	S	Baltimore G. & E.	34	1.60	4.7	2.27Je	28	5	15.0	70	41
6	O	Bangor Hydro-Elec.	35	1.90	5.4	2.74Je	25	3	12.8	69	31
5	O	Black Hills P. & L.	25	1.28	5.1	2.15Ap	5	3	11.6	59	27
91	S	Boston Edison	56	2.80	5.0	3.40Ap	NC	2	16.5	83	53
19	A	Calif. Elec. Power	15	.76	5.1	.93Ma	30	17	16.1	82	35
17	O	Calif. Oreg. Power	34	1.60	4.7	2.08N	17	4	16.3	77	37
7	O	Calif. Pac. Util.	28	1.50	5.4	2.20**De	2	5	12.7	68	29
58	S	Carolina P. & L.	27	1.10	4.1	1.70Je	12	4	15.9	65	37
26	S	Cent. Hudson G. & E.	16	.80	5.0	1.10Je	10	10	14.5	73	33
19	O	Cent. Ill. E. & G.	32	1.60	5.0	2.35Je	23	8	13.6	68	30
33	S	Cent. Ill. Light	59	2.60	4.4	3.95Je	43	8	14.9	66	41
50	S	Cent. Ill. P. S.	34	1.60	4.7	2.45Je	10	17	13.9	65	35
11	O	Cent. Louisiana Elec.	34	1.40	4.1	2.03Je	27	6	16.7	69	30
33	O	Cent. Maine Power	23	1.40	6.1	1.67Je	D2	7	13.8	84	33
114	S	Cent. & South West	40	1.40	3.5	2.16Je	10	13	18.5	65	36
11	O	Cent. Vermont P. S.	16	1.00	6.3	1.22Je	D2	2	13.1	82	28
108	S	Cincinnati G. & E.	28	1.20f	4.3	2.01Ma	12	8	13.9	60	39
6	O	Citizens Util. "B"	14	.90a	6.4a	1.07Ma	3	11	13.1	44	40
104	S	Cleve. Elec. Illum.	42	1.60	3.8	2.66Ma	34	9	15.8	60	47
4	O	Colo. Cent. Power	26	1.20	4.6	1.64Je	8	5	15.9	73	24
45	S	Columbus & S. O. E.	32	1.60	5.0	2.22Ma	28	5	14.4	72	37
336	S	Commonwealth Edison	43	2.00	4.7	2.72Je	10	9	15.8	71	47
10	A	Community Pub. Service	25	1.20	4.8	1.77Je	—	18	14.1	67	51

Rev. (Mill.)		(Continued)	8/8/56 Price About	Dividend Rate	Approx. Yield	Recent Share Earnings	% Increase	Aver. Incr. In Sh. Earns. 1951-55	Price-Earns. Ratio	Div. Payout	Approx. Common Stock Equity
2	O	Concord Elec.	44	2.40	5.5	2.71De	3	2	16.2	89	61
65	O	Connecticut L. & P.	19	1.00	5.3	1.20My	5	4	15.8	83	33
21	O	Connecticut Power	42	2.25	5.4	2.65Je	2	5	15.9	85	42
494	S	Consol. Edison	48	2.40	5.0	3.12Je	2	10	15.4	77	41
189	S	Consumers Power	49	2.20e	4.5	3.33Je	12	5	14.7	66	41
71	S	Dayton P. & L.	49	2.20	4.5	3.46Ma	15	4	14.2	64	38
34	S	Delaware P. & L.	45	1.60	3.6	2.27Je	19	10	19.8	70	32
220	S	Detroit Edison	36	1.80	5.0	2.28Je	13	11	15.8	79	42
120	A	Duke Power	29	1.20	4.1	1.86Ma	16	22	15.6	65	54
89	S	Duquesne Light	38	2.00	5.3	2.46Je	13	4	15.4	81	36
27	O	Eastern Util. Assoc.	35	2.20	6.3	2.66Je	12	0	13.2	83	36
2	O	Edison Sault Elec.	16½	.80	4.8	1.19Ma	NC	24	13.9	67	40
10	O	El Paso Elec.	45	1.80	4.0	2.48Ma	2	8	18.1	73	37
11	S	Empire Dist. Elec.	30	1.60	5.3	2.25Je	17	1	13.3	71	30
4	O	Fitchburg G. & E.	53	3.00	5.7	3.52De	8	3	15.1	85	55
43	S	Florida Power Corp.	52	1.60	3.1	2.57Je	24	19	20.2	62	34
93	S	Florida P. & L.	50	1.20	2.4	2.25Je	23	16	22.2	53	40
163	S	General Pub. Util.	36	1.80	5.0	2.77Ap	NC	12	13.0	65	39
6	O	Green Mt. Power	16	1.00	6.3	1.23Ma	7	7	13.0	81	37
51	S	Gulf States Util.	36	1.60	4.4	2.14My	10	17	16.8	75	31
21	A	Hartford E. L.	61	2.88	4.7	4.38Je	—	12	13.9	66	47
5	O	Haverhill Elec.	38	2.35	6.2	2.62De	34	—	14.5	82	100
66	S	Houston L. & P.	58	1.40	2.4	2.69Je	18	20	21.6	52	42
8	O	Housatonic P. S.	22	1.40	6.4	1.41De	19	0	15.6	99	54
25	S	Idaho Power	32	1.20	3.8	2.11Je	17	7	15.2	57	35
78	S	Illinois Power	60	2.60	4.3	3.86Je	18	6	15.3	67	35
40	S	Indianapolis P. & L.	30	1.40	4.6	2.01Je	18	2	14.9	70	38
19	S	Interstate Power	14	.74	5.3	1.06Je	6	6	13.2	70	31
30	O	Iowa Elec. L. & P.	29	1.50	5.2	2.28Je	19	10	12.7	66	31
31	S	Iowa-Ill. G. & E.	32	1.80	5.6	2.46Je	5	2	13.0	75	40
35	S	Iowa Power & Lt.	27	1.40	5.2	2.00Je	16	1	13.5	70	35
30	O	Iowa Pub. Serv.	17	.80	4.7	1.16Je	23	3	14.7	69	33
13	O	Iowa Southern Util.	23	1.28	5.6	1.79Je	14	7	12.8	72	36
56	S	Kansas City P. & L.	44	2.00	4.5	2.77Je	41	8	15.9	72	35
27	S	Kansas G. & E.	28	1.20	4.3	1.97Je	10	9	14.2	61	26
40	S	Kansas Pr. & Lt.	24	1.20	5.0	2.05Je	35	9	11.7	59	27
37	O	Kentucky Util.	27	1.28	4.7	2.00Je	D5	9	13.5	64	35
7	O	Lake Superior D. P.	25	1.20	4.8	1.67Je	14	4	15.0	72	38
6	O	Lawrence Electric	30	1.75	5.8	1.87De	34	D	16.0	94	62
17	S	Long Island Lighting	23	1.10	4.8	1.54Je	33	4	14.9	71	34
41	S	Louisville G. & E.	62	2.20	3.5	3.92Je	21	4	15.8	56	35
7	O	Lowell Electric Lt.	54	3.00	5.6	3.64De	19	D	14.8	82	59
9	O	Lynn G. & E.	32	1.60	5.0	2.03De	1	8	15.8	79	76
8	O	Madison G. & E.	45	1.60	3.6	3.46De	8	10	13.0	46	47
4	A	Maine Pub. Service	17	1.08	6.4	.94Je	D39	3	18.1	115	31
5	O	Michigan G. & E.	46	1.50b	6.3g	3.77Ma	14	13	12.2	40	35
144	S	Middle South Util.	31	1.50	4.8	1.98My	1	6	15.7	76	35
26	S	Minnesota P. & L.	28	1.40	5.0	2.21Je	22	8	12.7	63	34
2	O	Miss. Valley P. S.	30	1.40	4.7	2.47Je	D1	3	12.1	57	31
10	A	Missouri Pub. Ser.	14	.60	4.3	.99Je	24	19	14.1	61	29
5	O	Missouri Util.	26	1.36	5.2	1.90Je	3	3	13.7	72	36
37	S	Montana Power	45	1.80	4.0	3.08Je	12	5	14.6	59	36
130	S	New England Elec.	17	1.00	5.9	1.20Je	9	0	14.2	83	33
40	O	New England G. & E.	17	1.00	5.9	1.46Je	15	5	11.6	68	40
44	O	New Orleans P. S.	45	2.25	5.0	2.53My	D5	0	17.8	89	40
2	O	Newport Electric	21	1.00	4.8	1.40Ja	16	0	15.0	71	34
77	S	N. Y. State E. & G.	39	2.00	5.1	2.87Ap	17	6	13.6	70	38
210	S	Niagara Mohawk Pr.	31	1.80	5.8	2.30Je	4	6	13.5	78	34
75	O	Northern Ind. P. S.	39	1.80	4.6	2.84Je	11	6	13.7	63	33
118	S	Nor. States Power	18	.90	5.0	1.18Je	10	9	15.3	76	33
9	O	Northwestern P. S.	17	1.00	5.9	1.44Je	8	4	11.8	69	25
123	S	Ohio Edison	56	2.48	4.4	3.73Je	13	9	15.0	67	38
40	S	Oklahoma G. & E.	40	1.70	4.3	2.28Je	16	10	17.6	75	30
15	O	Otter Tail Power	29	1.60	5.5	2.26Je	16	9	12.8	71	34
443	S	Pacific G. & E.	52	2.40	4.6	3.39Ma	9	16	15.3	71	33

Rev. (Mill.)		(Continued)	8/8/56 Price About	Dividend Rate	Approx. Yield	Recent Share Earnings	% Increase	Aver. Incr. In Sh. Earns. 1951-55	Price-Earns. Ratio	Div. Payout	Approx. Common Stock Equity
44	O	Pacific P. & L.	29	1.48	5.1	1.92Ma	NC	4	15.1	77	28
123	S	Penn Power & Light	47	2.40	5.1	3.30My	8	9	14.2	73	29
210	S	Phila. Electric	40	1.80	4.5	2.52Je	10	5	15.9	71	40
32	O	Portland Gen. Elec.	25	1.20	4.8	1.69Je	5	6	14.8	71	39
58	S	Potomac Elec. Pr.	23	1.10	4.8	1.55My	40	7	14.8	71	40
77	S	Pub. Serv. of Colo.	49	1.80	3.7	2.83Je	19	7	17.3	64	38
273	S	Pub. Serv. E. & G.	25	1.80	5.1	2.44Je	12	2	14.3	74	37
67	S	Pub. Serv. of Indiana	39	2.00	5.1	2.46Je	1	3	15.9	81	33
26	O	Pub. Serv. of N. H.	17	1.00	5.9	1.22Je	4	13	14.0	82	36
11	O	Pub. Serv. of N. M.	14	.68	4.9	1.03Ma	8	4	13.6	66	33
23	S	Puget Sound P. & L.	29	1.28	4.4	1.57Ma	11	10	18.5	82	56
52	S	Rochester G. & E.	30	1.60	5.3	2.20Je	17	8	13.6	73	36
17	O	Rockland L. & P.	20	.70	3.5	.97De	20	11	20.6	72	29
8	S	St. Joseph L. & P.	24	1.40	5.8	1.74Je	12	7	13.8	80	40
45	S	San Diego G. & E.	24	.88	3.7	1.46My	42	2	16.4	60	40
8	O	Savannah E. P.	40	1.68	4.2	2.58My	25	5	15.5	65	28
8	O	Sierra Pacific Pr.	22	1.20	5.5	1.50Ma	11	14	14.7	80	28
154	S	So. Calif. Edison	52	2.40	4.6	3.36Je	8	3	15.5	71	36
38	S	So. Carolina E. & G.	20	1.00	5.0	1.40**My	4	40	14.3	71	29
6	O	Southern Colo. Pr.	15	.70	4.7	1.20My	D4	11	12.5	58	37
210	S	Southern Company	22	1.00	4.5	1.45Je	18	7	15.2	69	32
16	S	So. Indiana G. & E.	32	1.60	5.0	1.94Je	D11	5	16.5	82	33
5	O	So. Nevada Power	19	1.00	5.3	1.44Je	10	16	13.2	69	34
1	O	Southern Utah Pr.	18	1.00	5.6	1.13Je	20	D	15.9	88	38
3	O	Southwestern E. S.	21	1.08	5.1	1.66My	—	4	12.7	65	29
33	S	Southwestern P. S.	28	1.32	4.7	1.55Je	D3	4	18.1	85	30
21	A	Tampa Elec.	31	1.00	3.2	1.45Je	5	10	21.4	69	42
127	S	Texas Utilities	41	1.28	3.1	2.10Je	7	13	19.5	61	38
35	S	Toledo Edison	14	.70	5.0	1.04Je	2	5	13.5	67	30
12	O	Tucson G. E. L. & P.	28	1.20	4.3	1.83Je	6	10	15.3	66	33
119	S	Union Elec. of Mo.	28	1.40	5.0	1.73Ma	3	13	16.2	81	37
30	O	United Illuminating	28	1.30	4.6	1.61De	3	9	17.4	81	51
5	O	Upper Peninsula Pr.	29	1.60	5.5	2.18Ma	17	14	13.3	73	36
38	S	Utah Power & Lt.	55	2.20	4.0	3.36Je	14	8	16.4	66	42
106	S	Virginia E. & P.	46	1.80	3.9	2.67Je	10	13	18.4	68	34
24	S	Wash. Water Power	36	1.80	5.0	2.20Je	12	14	16.4	82	45
127	S	West Penn Elec.	28	1.40	5.0	2.12Je	8	10	13.2	66	29
64	O	West Penn Power	51	2.40	4.7	3.25Je	3	13	15.7	74	33
11	O	Western Lt. & Tel.	34	1.80	5.3	2.91Je	26	7	11.7	62	31
24	O	Western Mass. Cos.	39	2.20	5.6	3.26Je	9	12	12.0	68	52
95	S	Wisc. El. Pr. (Cons.)	35	1.60	4.6	2.44Ma	3	16	14.3	66	39
37	O	Wisconsin P. & L.	27	1.28	4.7	1.75Ma	9	4	15.4	73	35
34	S	Wisconsin P. S.	23	1.20	5.2	1.76My	NC	7	13.1	68	35
		Averages			4.8%			8%	15.1	71%	
		Foreign Companies									
188	S	American & For. Pr.	15	$ .80	5.3%	$2.02Ma	6%	2%	7.4	40%	46%
139	A	Brazilian Trac. L. & P.	8	.50	6.3	1.18De	D7	D	6.8	42	72
63	A	British Columbia Pr.	49	1.20	2.5	2.05De	37	27	23.9	59	27
16	A	Gatineau Power	29	1.40	4.8	2.06De	5	15	14.1	68	30
18	O	Hawaiian Electric	45	2.20g	4.9	3.67Je	33	—	13.4	62	38
11	A	Quebec Power	27	1.20	4.4	1.73De	11	12	15.6	69	48
45	A	Shawinigan Water & Pr.	95	1.80	1.9	3.48De	30	22	17.3	52	35

A—American Stock Exchange. B—Boston exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. January—Ja; February—F; March—Ma; April—Ap; May—My; June—Je; July—Jy; August—Au; September—S; October—O; November—N; December—De. D—Decrease. *If additional common shares have been recently offered, earnings are adjusted to give effect to the offering. Percentage change is in the net income available for common stock. **Based on average number of shares. a—Estimated annual rate. The "A" stock receives stock dividends. b—Also 3 per cent stock dividend December 30, 1955, which is included in the yield. c—Also 2 per cent stock dividend January 10, 1956. e—Also 5 per cent stock dividend June 15, 1956. f—Also 5 per cent stock dividend August 15, 1956. g—Also 10 per cent stock dividend April 30, 1956. NC—Not comparable.

What the State Commissioners Are Thinking About

Excerpts and digests from the opinions expressed in reports and addresses at the annual convention of the National Association of Railroad and Utilities Commissioners in San Francisco, California, from July 24th to 27th, 1956.

On Regulatory Practice

"REGULATORY practices and concepts which are routine with respect to the conventional types of electric plants, confront us with puzzling questions and unknowns at every turn in the nuclear power field. For one thing there are vast misconceptions on the part of the public as to rates for such power. When people read, or hear it said that one pound of atomic fuel is equivalent in heat value to approximately 1,500 tons of coal, they are ready to cheer at the prospect of cheap electricity. But how cheap will it be? We have no accurate knowledge on the cost of production of nuclear power and there is not even a basis for a reasonable guess as to what the rates to the public will be. In a general way, it can be said that with the passage of years and increased efficiency in the utilization of fissionable materials, and technical perfection of reactors, which is bound to come in the course of experience, the cost of production should be substantially decreased and the public will benefit from lower rates. But in the initial stages of operation, over a period that cannot be forecast, it can be said with reasonable certainty that the operating cost of atomic plants will not be less than that of the conventional type generating stations and it is more likely that costs will be substantially higher.

"Many questions occur to me. Let me mention a few. What are we going to allow in the rate base? Are items of cost associated with laboratory experimentation, research, and planning to be allowed as a capital expense or an operating cost?

"Take the matter of depreciation. At present in New York, as in many other states, annual depreciation is measured by the straight-line method, which is based on actuarial studies of the service life of groups of property. Wherever the straight-line method has been in use for a period of time, it has been developed to a point where the margin of error is very small. Can we apply the straight-line method of depreciation to a reactor? Who knows what the service life of such a plant is? We must also take note of the fact that the developments in reactor construction are very rapid. Dynamic American

genius in the laboratory and in the engineering establishment, having developed certain types of reactors, is not resting on its oars. The engineers and the physicists are constantly at work improving, changing, and modifying existing reactors and studying the production of new ones. Thus a breeder now under construction on order of a utility company may be obsolete by the time it is scheduled to go into operation or within a few years after it is put to use. How are we going to treat rapid obsolescence? Is the consumer to pay the entire bill? Or should the stockholders share in the expense and, if so, to what extent? A myriad of other questions arise, all fraught with unknowns. The answers to the questions that will confront us and the solutions to the problems that will arise will not be easy. In the light of the uncharted areas in which we will soon have to function, it is not too soon for us to alert ourselves to the problems and do some long-range thinking on the subject."

—BENJAMIN F. FEINBERG,
Retiring president, National Association of Railroad and Utilities Commissioners.

On Cost of Capital as Related to Rate of Return

"COST of equity capital determinations are widely based on earnings-price or dividend-price ratios, or a combination of both. These ratios are usually developed by using averages over some period considered appropriate. Adjustments are usually made for underpricing and, in the case of dividend-price ratios, for the amount of earnings considered to be needed above the dividend—in other words for dividend pay-out. The theory is that the investor looks at the current or recent earnings and dividends, decides on the yields he wants from an investment in the stock, and thus sets the market price. This theory, of course, is greatly oversimplified and is subject to a number of weaknesses.

"In the first place, the market price of any stock may be affected by general market movements in a way that is wholly unrelated to its own record as to earnings and dividends. In a bull market, for example, the price of the stock may go up even if earnings are falling. In addition, investors will give due weight to expected future developments, particularly those which will directly affect the earnings of the stock they are looking at.

"Then, too, investors quite often ignore factors which cause short-term fluctuations in earnings, on the expectation that these fluctuations will average out over a period of time. The result is that earnings are subject to considerable fluctuations which are not reflected or not fully reflected in market prices.

"These facts pose the question of whether earnings and dividend-price ratios alone ever accurately represent investors' evaluation of current earnings and dividends except by coincidence. Certainly, they may be used as a guide, but they must be adjusted to reflect the long-term and growth effect.

"One final point in this connection is the effect of inflation. Inflation has the effect of causing attrition in earnings as construction and operating expenses go up and average plant investment rises. Since we set utility rates for the future, a specific allowance in the rate of return, above the cost of capital, is needed to offset this attrition. In other words, a rate of return based on the capital alone is not appropriate for application to a net investment rate base. Of course, inflation might be allowed for in the rate of return, and there are a number of so-called 'fair value' jurisdictions which handle the problem in this fashion. By way of giving some recognition to this factor, the Florida commission had chosen to use the investment level at the end of the test period rather than the average investment."

—P. M. SCHUCHART,
Director, public utilities department, Florida Railroad and Public Utilities Commission.

". . . The cost of capital . . . is the amount the utility company must pay to meet the requirements of investors who provide the funds it needs in carrying out its functions. We should view the determination of the cost of capital as a bargaining process in the market. The utility seeking funds presents its needs, along with a history of its operations and its plans for the future, to those who have funds available. Among the items of historical nature which are presented are

income statements, dividend records, information concerning earnings per share, and so forth.

"The providers of funds examine this data with great care. They determine the prevailing rate for foregoing the present use of funds. They appraise the prospects for receiving repayment of the funds at some future date, taking into consideration the operating history of the prospective borrower and any likely changes in his situation. Investors consider the efficiency and continuity of the utility's management. They consider the possibility of changes in the arts which might affect the status of the particular firm in the industry or might even have a bearing on the future of the entire industry. They review the prospects for change in general economic conditions and try to estimate the effects of economic fluctuations on the company and on the industry. They consider the probable marketability of its securities.

"And, finally, investors review carefully the probable payment which they will receive from the utility with the payments they might receive from other sources.

"While these various factors which investors consider appear not to be completely measurable, nevertheless the investors finally arrive at an exact amount of payment which they feel they must have in order to permit the utility to use their funds. Assuming that the utility concludes that this is a reasonable appraisal, the final cost of this particular lot of funds is the agreed-upon payment plus the added cost that the utility must bear as a result of the expense of bringing the user and provider of funds together on satisfactory terms. It should be made clear, however, that the agreed payment plus expenses represent the cost of this lot of capital alone. The conditions under which funds are exchanged vary from year to year, month to month, and on occasion even from day to day. Thus, this compensation does not indicate what those who have already committed funds to the use of the company feel is adequate payment for the use of their funds. Nor does it indicate what the appraisal of future investors will be."

—TOM HANCOCK,
Economist, Michigan Public Service Commission.

On Reaction to the *Mobile* and *Sierra* Cases

"THE attention of the association is called to the now famous recent decisions of the United States Supreme Court in the Mobile and Sierra cases (United Gas Pipe Line Co. *v.* Mobile Gas Service Corp. —— US ——, 76 S Ct 373, 12 PUR3d 112; Federal Power Commission *v.* Sierra Pacific Power Co. —— US ——, 76 S Ct 368, 12 PUR3d 122). One of the commissioners of the Federal Power Commission recently stated that these cases already bid fair to surpass the Hope Natural Gas Case in the frequency with which they are cited before that body. There have been, and doubtless will continue to be, serious disagreements over their meaning and implications, but they are, up to now, the law of the land, and we must perforce live with them.

"It is unnecessary to describe these cases in this report. It is perhaps enough to say that they both uphold the power of a utility to bind itself by special contract to furnish service at a special rate, and that such a contract cannot be abrogated by the unilateral action of the utility in filing a superseding rate under either the Natural Gas Act or the Federal Power Act.

"These cases would seem to be of great importance to the state regulatory agencies from a rate standpoint. As the result, it would appear to be desirable for such bodies to review the local statutes in order to make sure that some jurisdiction over special contracts is retained by the commissions. It is difficult to see how a reasonable control can otherwise be exercised over utility rates in general, except by taking refuge in the highly debatable exception referred to in the Sierra Case as 'an adverse effect on the public interest.' In an era of shifting economic standards, there might be raised a very grave question as to the feasibility of permitting any utility to bind itself immutably by a long-term rate contract. If the governing statute is sufficiently clear, it would seem that jurisdiction under these cases could still be retained in the local regulatory agency to supervise the desirability of continued operations under a contract which might so

burden the utility as to affect its ability properly to serve the rest of its customers. Most certainly, it ought to be made clear by statute that in a subsequent rate case, the commission is not bound to accept a contract which results in less than a fair return as inseparable from the other operations of the utility with the result that the balance of its customers are penalized thereby.

"Neither the Mobile Case nor the Sierra Case passed on the question of whether these special contracts were unreasonably discriminatory, and as such might be set aside by the commission. The Mobile Case was not presented in a way which would involve such a determination, and the Sierra Case was eventually remanded for findings, among others, as to this consideration. If the statutes in force at the time of the inception of such a contract clearly so provide, it would seem that a special contract could and should be reviewed by the regulatory agency in order to determine whether its effect is unreasonably discriminatory under then existing circumstances, even though it may have been quite defensible at the time it was entered into.

"Mr. Justice Harlan, in writing these decisions, found no difficulty in differentiating between the railroads and the electric or gas utilities in this regard. He was of the opinion that the Interstate Commerce Act clearly forbade special rates, and that the Federal Power Act equally clearly contemplated them. It is quite difficult to understand this differentiation in principle as distinguished from statutory construction. There would seem to be just as cogent arguments either way in one case as in the other. The industrial competitor or even the neighboring noncompeting industrialist doubtless would feel equally aggrieved at special treatment in utility rates as in railroad rates. In so far as contracts involving local rates are concerned, the power of control still rests or should rest in the hands of the local commission in either case."

—Report of Committee on Public Utility Rates, David M. Brackman of Massachusetts, chairman.

On Accelerated Depreciation

"THIS committee commented at length in the 1955 report upon accelerated depreciation for income tax purposes as permitted by § 167 of the Internal Revenue Code of 1954. At that time commissions in eight states had approved tax reserve accounting in one form or another on the basis that the tax reductions are really tax deferrals. As this is written, commissions in twenty-three states have considered this matter from an accounting standpoint. In all but two cases the commissions found that normalized taxes should be used in determining earnings and have found that the tax reduction should be treated as a deferral by setting it aside in a tax reserve or restricted surplus account. This action seems to meet the intent of Congress of providing capital for expansion.

"In one state, Pennsylvania, the commission decided that the tax effect of considering accelerated depreciation for tax purposes should be regarded as a tax saving and should be carried down to net earnings. In another state, Wisconsin, the commission allowed depreciation expense to be increased by an amount equal to the tax savings resulting from accelerated depreciation. Only actual taxes paid were allowed as tax expense. The tax savings, therefore, are carried through to the depreciation reserve. . . .

"The commissions' decisions finding that normalized taxes should be used in determining net earnings have generally specified that this action was being taken purely as an accounting ruling and was not controlling in rate making. As was explained in our last year's report, a difficult problem may occur in determining whether the accumulated tax reserve or restricted surplus account should form the basis of a deduction from the rate base (or perhaps a reduction in the rate of return). Appropriate treatment may well vary in different jurisdictions because of the difference in regulatory laws or commission policy. . . .

"The developments since this committee's last report have clarified the matter somewhat. For one thing, there appears more likelihood that the tax law will be permanent. It seems appropriate to conclude this discussion by quoting the following from the

1955 report, with the observation that the philosophy therein expressed seems to be consistent with the general thinking of the regulatory expressions thus far received:

"'The intent of Congress of providing capital for expansion would be defeated if utilities were permitted to disburse the tax reduction to their stockholders or required to pass it on to their ratepayers. The retention of the tax reduction as a source of capital would be accomplished by a reservation of surplus or a reserve for taxes. If reserve accounting should be the ultimate answer, the reserves that will be created may require consideration in connection with rate case valuation. Until the matter is further clarified, it would seem desirable that the state commissions defer taking any final stand resulting in the establishment of a general binding precedent.'"

—Report of Committee on Valuation, Albert P. Bruch of Wyoming, chairman.

On Importance of Attrition

"As every member of a regulatory body has from time to time observed, the combination of increased equipment costs and increased demand for service has inevitably resulted in a type of fundamental imbalance, particularly in the gas, electric, and telephone industries. . . .

"Attrition has been defined as the tendency of the rate of return to diminish gradually as plant facilities are added at current cost levels. To some extent it has been offset by technological advances reducing unit costs or expenses. This cannot continue indefinitely, however. There are definite limits to the refinements in technique established by the physical properties of matter. As pressures and temperatures are increased in steam-generating plants, for example, the problems of construction and metallurgy presented become more and more complex. The economies realized in recent very large, expensive, and complex installations have been in the order of tenths of a mill per kilowatt-hour, and there is grave question as to the possibility of realizing substantial additional efficiency through further technical refinements. Management is even now faced with very serious problems in choosing between substantial additional investment and slightly increased running expense. Consequently, as we have previously tried to point out, the factor of attrition may well become a serious consideration in the field of electric power in the near future if, as everyone seems to take for granted, the demand for energy continues to grow at the present amazing rate.

"There appears to have been little hesitation on the part of the state commissions in recognizing this problem and there have been a number of ingenious methods adopted to meet it. Some commissions have adopted a year-end investment figure, some have increased the rate of return, arbitrarily or by formula, and others have encouraged the utilities to present their cases on the basis of a future year in order to reflect the future investment picture. Still another method that has been adopted is to include plant under construction in the rate base. . . . Both the utilities and the commissions seem to be well aware of the situation, are watching it carefully, and are meeting it fairly and conscientiously when it is necessary to do so."

—Report of Committee on Public Utility Rates, David M. Brackman of Massachusetts, chairman.

On Factors Determining the Cost of Money

"The past nine months have seen an exceedingly high level of business activity throughout the country. Gross national product neared $400 billion and the national income a new high level of $331 billion. Almost every segment of the economy enjoyed great prosperity except the farmer and the rancher.

"Debt costs have risen to a 20-year high, and in recent months the supply of money has been exceedingly tight. Yields on intermediate and long-term government bonds

have risen to above 3 per cent, and this has had an impact on all other types of loans. The nation's banks pushed their interest rates up in addition to turning away potential borrowers. Further evidence of higher money costs is the decline in the market prices of preferred stocks generally.

"At the same time that the market prices of bonds and preferred stocks were declining, common stocks had increased to an all-time high. While dividends and earnings have been increasing, market prices have increased even faster, and as a result dividend-price ratios and earnings-price ratios have declined. Market analysts, with whom this matter has been discussed, feel that this is caused by investors' expectations of still further increases in earnings and dividends. The reactions of the stock market at the time of the President's heart attack of last September and again upon his announcement that he would be a candidate for re-election point up the fact that market changes are often caused by other factors than present earnings or dividends."

—Report of Committee on Valuation, Albert P. Bruch of Wyoming, chairman.

On the Separations Manual

". . . Following the instructions of the 1954 and 1955 conventions, with the co-operation of the Federal Communications Commission, your committee was able to secure the adoption of the so-called Modified Phoenix Plan as an amendment to the existing method of separations. . . .

"Not only does it provide a more equitable method of separation but it is a recognition by the Federal Communications Commission of its desire to aid in the disparity problem, and it is an outstanding precedent for co-operation between the state and federal regulatory agencies. . . .

"The proposed revision to the Separations procedure (the Modified Phoenix Plan) contemplates that in each state the book costs of associated company interexchange message telephone toll lines plant which is physically located within that state and is used to furnish intrastate or interstate long-distance telephone service to subscribers therein, would be combined with the book costs of similar plant, in the same state, of the Long Lines Department of AT&T. (The book costs of any interexchange message telephone toll lines plant of either Long Lines or an associated company used for message telephone traffic which merely transits the state and serves no subscribers therein would not be included.) This combined total of associated company and Long Lines book costs would then be apportioned between intrastate and interstate operations on the basis of the relative conversation-minute-mile use of such plant. The apportionment of expenses associated with such plant would continue to follow the apportionment of the plant in accordance with the existence procedures."

—Report of the Special Committee Co-operating with the FCC in Studies of Telephone Regulatory Problems, Spencer B. Eddy of New York, chairman.

On Accounting Revision

". . . Prescribed utility accounting has remained substantially static for the past twenty years and has not kept pace with the dynamic changes which have occurred in utility operations. . . .

"Your committee, the FCC staff, and the depreciation committee of NARUC have been concerned for some years with ways and means of simplifying this cumbersome accounting for station apparatus. Our efforts have been directed toward determining the feasibility of substituting plant accounting on a total service-life basis for the present location life basis. The FCC presently has before it an informal proposal from the Bell system, made in response to requests for studies of ways to simplify station record keeping, that station apparatus be made subject to the so-called "cradle-to-grave" plant accounting treatment. This proposal

has been concurred in by a special committee of the USITA. Under this proposal, not only subscriber telephones and teletypewriter machines would be accounted for on the new basis, but small private branch exchanges and telephone booths would be transferred to an enlarged station apparatus account and be accounted for in the same way. The proposed revisions in the system of accounts will do away with plant retirement accounting for interim outward and plant addition accounting for inward movement of station apparatus reused, leaving such equipment in the asset account at original cost throughout its physical life whether as a unit of telephone equipment in stock available for installation or in process of being repaired or rebuilt, installed and used in service, or in the status of left-in equipment. Station apparatus parts would also be charged directly to the plant in service account if important enough to qualify as major units of property or as betterments, or otherwise would be charged directly to expense accounts but never to material and supplies account.

"The FCC staff has been informed that your committee views the proposed total service-life or "cradle-to-grave" accounting for station apparatus, including small private branch exchanges and booths, as having many advantages and would hope to see it adopted as soon as feasible. Meters for use in measuring electricity, gas, or water delivered to users are now accounted for in the manner here proposed for telephones with satisfactory results."

—Report of the Committee on Accounts and Statistics, A. R. Colbert of Wisconsin, chairman.

On Regulatory Protection of Consumers

"ONE of our responsibilities, it seems to me, is to realize fully that regulation must have a long-range view. We do a partial job, and a poor job, if we think that regulation begins and ends with hammering down the rates which a utility can charge. All of us are familiar with the American fable which concerns the farmer who sought to save corn and hay by feeding his horse less and less, until the horse died. Well, if we want a utility to keep on working, we must supply enough "feed." Only a healthy utility can develop new services and get the capital to introduce the better service that the public interest requires.

"The commission that fails to see that the utility continuously receives a reasonable and fair return is not, in my opinion, properly protecting the consumers in the long run.

"The money that the impoverished company is compelled to borrow from time to time is secured (if obtainable) at a much higher cost than in the case of the company that has shown a consistently fair return over the years and is giving satisfactory service to the public it serves. These things cannot be accomplished when a regulatory commission only allows the utility a miserly return on its investment. . . .

"I think it is possible that someone is thinking that I can see only sweetness and light, that I favor 'easy regulation.'

"In closing, I'd like to speak forcefully on this point. What I suggest is far from 'easy regulation.' In fact, I think that taking a short-range view, cutting rates on existing services, perhaps is the easiest of 'easy regulation.' It's pretty simple and, unhappily, it's adverse to the best interest of the consumer.

"What I do suggest is much more difficult, a tiresome and often bewildering assignment. It's the chore of keeping today's costs as low as they can and at the same time making sure that tomorrow we'll have the amount and kind of services we want."

—H. LESTER HOOKER,
Chairman, Virginia State Corporation Commission.

"IT has been well established that regulatory agencies are not to substitute their judgment for that of management. This is a principle, the soundness of which cannot be questioned. But the very fact that we are not charged with responsibility of management emphasizes the proposition that our job as regulators is to safeguard the public's interest in utility matters. It can be assumed that management is going to carefully protect the interests of the stockhold-

ers and investors. That is their duty; ours is to look after the consumer to see that he is not taken advantage of either as to rates or service.

"The theory of regulation is that it is a substitute for the forces of competition. In competitive business the customer has a choice—if he cannot get the commodity which suits him one place he ordinarily can go to any number of other sources of supply. If the price is not right in one market place there are plenty of others, with the result being that he will finally procure the commodity or service he wants at the price which is the best obtainable.

"When it comes to public utility service the consumer must depend on us. He is precluded from shopping around to get the best deal he can. If his service is unsatisfactory he cannot in most cases go anywhere else. If the price is too high he likewise has no choice in the matter. Regulation must step in here and do for him what he cannot do for himself, or what competitive enterprise would do for him if it had the chance. Regulation must see to it that the utility consumer secures the same satisfactory service at a price which is the best obtainable that he might expect to procure if he were dealing in an open competitive market."

—Robert L. Moulton,
Chairman, Ohio Public Utilities Commission.

"In oversimplified terms, consumer protection is provided by the various regulatory bodies in these ways:

"1. By requiring utilities to prove themselves to be ready, willing, and able to perform the service proposed.

"2. By permitting utilities to charge only such rates as have been found to be just and reasonable.

"3. By ascertaining that utility facilities continuously meet high safety standards and that adequate and nondiscriminatory service is rendered at all times.

"4. By marshaling all determinable facts and figures through public hearings or independent studies before reaching any decision.

"5. By having counsel assume the rôle of 'public protector' in proceedings befor it, various federal commissions, and the courts.

"6. By rendering to the consumer every possible assistance in procuring continuously adequate utility service.

"7. By maintaining thorough and continuing examinations of the books, accounts, and financial status of the various utilities.

"8. By affording to the traveler whatever protection may be required, within the limits of available financing, at highway-railroad intersections.

"Because of the broad scope of their powers, the determinations of public utility regulating bodies have a greater impact on more components of consumer costs than do those of any other governmental agency."

—Aaron L. Jacoby,
Member, New York Public Service Commission.

On Atomic Energy

"The committee has proceeded on the premise that privately owned nuclear energy electric-generating plants will be constructed, and that numerous problems will be presented to state regulatory commissions. President Feinberg stressed the importance of these problems in his address . . .

"Not only will regulatory problems be presented to the state public utility commissions, but also to other state regulatory bodies. Among these, state boards of health will be concerned with safeguards for public health; industrial or labor commissions with safe places of employment; colleges and universities with research, development, and education; and legal officers and legislators with the adequacy of state law to enable proper policing of industrial activities in the field.

"We have advocated the creation of study committees in each state, made up primarily of representatives of those state agencies whose activities will be involved. Such a committee would have the objective of determining wherein state laws may be insuffi-

cient, recommending remedial legislation where needed, and co-ordinating the activities of state and federal governments to promote effective and efficient controls where required. . . .

"We do recommend that each state utility regulatory commission which is not presently participating in such a program give consideration to the subject and promote a co-ordinated effort, first within its own state, and then with other states and the federal government."

—*Report of the Committee on Nuclear Energy in the Electric Industry, George P. Steinmetz of Wisconsin, on behalf of John H. McCarthy of Michigan, chairman.*

"EACH type of reactor presently under study by the commission or by industry in association with the commission presents, as would be expected, advantages and disadvantages with regard to cost, reliability, safety, and other important factors; and, as yet, no single type of reactor has emerged as being so far ahead of the field as to warrant concentration on it as the best prospect for the production of competitive commercial power.

"It is this situation which has led the commission to engage in reactor research and development on a wide front, and it is this situation which, perhaps, has made it appear to some that we are moving too slowly in the area of full-scale application. The need for electrical power generated by nuclear energy is not as pressing in our country, thanks to our bountiful supply of fossil fuels, as it is elsewhere. Because this is so and because I firmly believe that we shall make greater progress in the end by concentrating at this time all of our skills on the technical problems yet to be solved and which must be solved before we can build commercial nuclear power installations which are truly competitive, I believe that we are not moving slowly in the field of application. On the contrary, I believe that we are moving in a manner which will ultimately prove to be the most expeditious of all.

"It seems to me that the very nature of our problem, the time required for design and construction of commercial nuclear installations, will give us, the commission and yourselves, an opportunity to develop and to put into practice regulations which will protect the public in every phase of the public interest and yet which will not be repressive or restrictive in any manner.

"The Atomic Energy Act of 1954, which greatly enlarged the opportunity for private or nongovernment activities in the nuclear energy field, imposed upon the commission with regard to such activities a dual responsibility to promote and at the same time to regulate them.

"As you know, most regulated industries came into being first in a small way, and as they grew step by step, the necessity of regulation and the type of regulations desirable became apparent through experience. Here we are faced with a novelty in that we are planning regulations for an industry which is not yet in being, where predictions and estimates must take the place of knowledge gained through experience."

—HAROLD S. VANCE,
Member, Atomic Energy Commission.

On State and Federal Co-operation

"IT is believed that much improvement can be made in the regulation of transportation agencies under Paragraph (3) § 13 of the Interstate Commerce Act. Among other things, this part states as follows:

" 'The commission may confer with the authorities of any state having regulatory jurisdiction over the class of persons and corporations subject to this part or Part III with respect to the relationship between rate structures and practices of carriers subject to the jurisdiction of such state bodies and of the commission; and to that end is authorized and empowered, under rules to be prescribed by it, and which may be modified from time to time, to hold joint hearings with any such state regulating bodies on any matters wherein the commission is empowered to act and where the rate-making authority of a state is or may be affected by the action taken by the commission. The commission is also authorized to avail itself of the co-operation, services, records, and facilities of

such state authorities in the enforcement of any provision of this part or Part III.'

"It is our belief that the Interstate Commerce Commission has not fully availed itself of the provisions of the part of the act quoted above. After reviewing its practices as revealed by the numerous § 13 decisions, it apparently does not even desire to do so. It has dealt with the state regulatory bodies at arm's length, and treated them as unwanted stepchildren. Even in spite of the suggestions by Congress as announced in the above part of the act, the state commissions are treated as any other defendants in litigation before the Interstate Commerce Commission. We believe there should be a more sympathetic understanding of the problems of the state commissions, and substantially more co-operation extended to them. With the hope that there can be substantial improvements in the work of regulation of transportation agencies as between the Interstate Commerce Commission and the state regulatory bodies, it is suggested that a committee consisting of not less than five members from this association be appointed by the president to confer with the Interstate Commerce Commission, which will lead to greater co-operation and improved understanding between the state commissions on the one hand, and the federal body on the other. Further, that this committee also have the authority and power to go to Congress, if necessary, to implement or secure any amendments to the present law which will encourage and develop this matter to a satisfactory end."

—Report of the Committee on Progress in the Regulation of Transportation Agencies, Ralph C. Horton of Colorado, chairman.

". . . The ICC has been criticized for not inviting state commissions to participate under the co-operative plan in § 13(4) cases where the state commission had finally acted unfavorably on applications of rail carriers for permission to increase intrastate rates or fares. Such cases do not seem to fall under the co-operative plan for the reason that there is nothing of like nature pending before the state body. As I have pointed out, the co-operative plan contemplates co-operation in joint hearings 'where similar issues are pending before the ICC and a state commission.' However, if the state proceeding were reopened and a joint hearing with the ICC suggested, the co-operative plan would immediately become operative. Undoubtedly this would not be helpful in all cases. But there are situations where it might be beneficial. In fact, the procedure has been followed in several instances, and has worked well."

—HOWARD G. FREAS,
Commissioner, Interstate Commerce Commission.

On Regulatory Progress

"DURING the period covered, three matters appear to deserve special mention; namely (1) settlement of the antitrust suit against the Bell system; (2) regulation of independent natural gas producers by the Federal Power Commission; and (3) accelerated depreciation under § 167 of the Internal Revenue Code of 1954.

"(1) Settlement of the antitrust suit *versus* the Bell system.

"The antitrust suit against the American Telephone and Telegraph Company, pending since 1949, was settled on January 24, 1956, by the signing of a consent decree in the federal court in Newark, New Jersey. Under the terms of this decree AT&T must: (1) license 8,600 existing patents to all applicants without royalties; (2) license all its other patents, present and future, to any American company at 'reasonable and nondiscriminatory' rates; (3) discontinue all business not directly connected with the communications field; and (4) maintain uniform cost accounting methods for its manufacturing subsidiary, Western Electric.

"The original complaint sought either a divorce of AT&T from Western Electric or dissolution of the latter. Had either of these been decreed, Western Electric would have been put in the telephone and electronic manufacturing fields as an independent organization, creating many difficulties for various existing manufacturers. However, under the decree, Western Electric will continue as a manufacturing part of the Bell system, but will be required to allow certain patents to be used royalty free by others.

"By virtue of the decree and the fact that

Western Electric remains as the manufacturing branch of the Bell system, state and regulatory commissions continue to have power to control charges for Western Electric services to Bell operating companies. The decree prohibits AT&T and Western Electric from continuing in the business of leasing and maintaining facilities for private communication systems not subject to public utility regulation. This requirement must be accomplished within five years. Several restrictions were placed by the decree on the intercompany relationships between AT&T and Western Electric: (1) Western Electric was enjoined from paying any patent royalties to the parent company; (2) Western Electric was prohibited from manufacturing any equipment not useful in furnishing common carrier communication service; and (3) Western Electric was directed to maintain cost accounting methods which will afford a valid basis for determining the cost to Western Electric of equipment sold to the Bell system.

"(2) Regulation of independent natural gas producers by the Federal Power Commission.

"In February President Eisenhower vetoed the Harris-Fulbright natural gas bill which would have exempted independent natural gas producers from regulation by the Federal Power Commission.

"The Federal Power Commission advises that since the issuance of the opinion of the Supreme Court of the United States in the Phillips Petroleum Case (347 US 672) it has received approximately 14,500 independent producer rate schedule filings. Of that number 3,338 were for increased rates. As of April 1, 1956, 3,108 of these applications for increased rates, involving increases of approximately $21,000,000, were permitted to go into effect without suspension; 230 involving increases of approximately $22,000,000 were suspended; 191 of the suspended cases involving increases of almost $19,000,000 are still pending, and 39 of those proceedings involving slightly over $3,000,000 have been disposed of as follows: (1) increases allowed: $2,300,000; (2) increases denied: $831,000; and (3) requests withdrawn: $53,000.

"(3) Accelerated depreciation under § 167 of the Internal Revenue Code of 1954.

"Many problems have arisen from the liberalized depreciation provisions of § 167 of the Internal Revenue Code of 1954. Foremost among them, perhaps, is whether these provisions result in a tax saving or a tax deferral. For the most part, the commissions that have acted have been requested to prescribe accounting procedures only.

"To date some fourteen or fifteen state commissions have provided for treating the tax reductions as deferrals by accumulating the deferred credits as either reserve or surplus. Although these commissions appear to be in agreement as to the fundamental principle of deferral and consequently as to the need of a provision for deferred taxes to be charged to income, they have differed as to the accounts to which such provision for future taxes should be credited. Nine commission orders favor crediting surplus, usually restricted as to payment of dividends, and seven favor some form of reserve account. The Wisconsin commission in Re Wisconsin Fuel & Light Co., 2-U-4138, issued an order which provides that the applicant electric company charge to depreciation expense the sum of the amount of depreciation under the straight-line method plus the reduction in federal income taxes resulting from the use of the sum-of-the-years-digits method. Thus, it will be seen that the depreciation expense will be greater than the amount computed on the straight-line method and federal income taxes will be reduced because of the use of accelerated depreciation."

—Report of the Committee on Progress in the Regulation of Public Utilities, W. Marshall King of Virginia, chairman.

On Transportation Policy Report

"THERE is a wide variance of opinion regarding the so-called Weeks report and as we stated in 1955, we are not making any definite recommendations for action to be taken by the state regulatory commissions.

"It is our opinion that no decided position can be taken by the states as a group except

possibly we want to retain the identity of all types of transportation. We would be opposed to placing all methods of transportation under one corporation resulting in so-called 'department store' type of transportation. It is believed one reason the motor carrier industry is opposed to the Weeks or Cabinet Committee report is the fear it will destroy the identity of motor carriers as a competing method of transportation, other than its belief the report is rail promoted."

—*Report of Committee on Rates of Transportation Agencies, Jefferson C. Church of Wyoming, chairman.*

Resolution for Federal and State Regulatory Jurisdiction over Transportation Rates

"WHEREAS, There is now before the national Congress HR 525 (the so-called Hinshaw Bill), a bill to repeal §22 of the Interstate Commerce Act which section now, in effect, exempts from federal regulation rates on transportation performed for agencies of the federal government, and

"Whereas, The provisions of §22 of the Interstate Commerce Act are made applicable to transportation by motor and water carriers and freight forwarders by reference in Parts 2, 3, and 4 of the Interstate Commerce Act, and

"Whereas, The substantial and continuing abuse by agencies of the federal government of the provisions of this section of the Interstate Commerce Act has fostered unfair and destructive competitive practices among common carriers in violation of the specific terms, as well as the intent, of the national transportation policy, and

"Whereas, It is the general feeling among shipping interests in all industries that it is wrong for the freight of the government to be handled by common carrier transportation companies at less than the tariff rates charged other shippers under similar conditions, and

"Whereas, The unwarranted lack of federal control over interstate transportation rates of common carriers when transporting for agencies of the federal government has fostered in such agencies an increasing disregard for the authority of the state regulatory bodies to such extent that such government agencies are demanding from common carriers secret, sealed competitive bids for intrastate transportation in open violation of the rules and regulations of many state commissions and the laws of those states, and

"Whereas, Attempts by the individual states to preserve their rights to regulate intrastate transportation provided by common carriers to the government agencies have resulted in the United States Department of Justice actively initiating or supporting or offering to support legal actions seeking to defeat state regulatory supervision of such transportation by such carriers, and

"Whereas, Such legal proceedings have already in California and Texas resulted in decisions unfavorable to state regulatory authority, and

"Whereas, The just and fair state regulation of common carriers providing service to the government agencies, including the military services, could have no bona fide adverse effect on the national defense in peacetime and could and would be overridden by proper federal authority—without protest on the part of the states—in time of war or other national emergency, and

"Whereas, Unified action of the states appears to be urgently needed to resist these unwarranted attempts to evade state authority,

"Therefore Be It Resolved, That the National Association of Railroad and Utilities Commissioners supports the repeal of §22 of the Interstate Commerce Act (and related sections in Parts 2, 3, and 4 of such act) as proposed in HR 525, and

"Be It Further Resolved, That the association strongly opposes the actions of agencies of the federal government in advocating, promoting, and supporting the evasion of state authority under the nebulous and wholly fictional claim of possible potential interference with the national defense, and

"Be It Further Resolved, That the association intervene in any proceeding before the Supreme Court involving the potential loss by a state of its regulatory powers in this field, and

"Be It Further Resolved, That the attorneys for the association be authorized to appear before the proper congressional committees and otherwise to transmit to the Congress the intent of this resolution."

The March of Events

Quoddy Study

THE United States and Canada asked a joint commission to find out if development of electric power from the high tides of Passamaquoddy Bay is feasible. Congress approved a look into the power possibilities of Passamaquoddy at its recent session.

Passamaquoddy Bay is in Maine and Canada's New Brunswick Province. Its extremely high tides have long been viewed as a possible source of inexpensive electric power.

The two countries referred the project to the International Joint Commission, formed by the United States and Canada early in this century to try to work out various disputes over waters that criss-cross the boundary between the two countries. Acting Secretary of State Herbert Hoover, Jr., told the commission it should complete its work within three years and that its report should include "the details of the specific design, cost estimates, and an estimate of the benefits to be derived or the losses to result from this project." The U. S. agreed to pay up to $3,000,000 of the costs of the survey.

Alabama

Private Firm May Acquire Power Co-op

A MOVE to sell the Tombigbee Electric Co-operative, serving more than 4,000 customers in rural Marion and Lamar counties, to the Alabama Power Company, was reported under way recently in the state.

A group favoring the sale elected eight of the nine members of the utility's board of trustees on August 1st.

The sale, if finally accomplished, would be the first in recent southeastern history in which public ownership is discarded for private ownership. Actual sale, however, must be approved by a two-thirds vote of actual users of the electricity. No such election has been called. The president of Tombigbee opposes the move.

The Tombigbee Electric Co-operative represents an investment of about $2,250,000 in transmission lines. It purchases its power from Alabama Power.

The group advocating the sale promised lower electric rates immediately under Alabama Power Company ownership. Organized as the committee for cheaper electricity and better service, it contends the co-operative lost money every year except one since its organization.

Nebraska

Steam Power Setup to Precede A-Plant

THE Consumers Public Power District's board of directors has approved a move to take immediate action to build a steam-generating plant near Hallam. District officials noted the plant construction will be designed around the proposed atomic reactor. However, a fuel-fired boiler system will be installed at first to insure firm power deliveries prior to the completion of the reactor and its trial operation. At the same time, the board offered to provide some additional capacity for other customers of the Nebraska Public Power System.

Negotiations with the Atomic Energy Commission were continuing over the construction of the proposed nuclear reactor at the Hallam site.

"However," R. L. Schacht, Consumers' general manager, said "the immediate needs for action on a power supply source are such that it has been deemed wise to get the Hallam plant under way with the least possible delay without jeopardizing the future of the atomic reactor."

New York

Natural Gas Rates Cut

THE Niagara Mohawk Power Corporation has received from the state public service commission approval of a new rate schedule that would cut the cost of natural gas delivered to its customers by $663,825 a year. The lower rates are slated to go into effect on September 7th.

"Natural gas rates in the several areas served by Niagara Mohawk have differed because gas was introduced in different years and at varying costs, and rates to consumers have varied accordingly," says Gustav S. Watters, executive vice president. "The cost to Niagara Mohawk of purchased natural gas is now uniform at all delivery points across the state," he added, "and the new rates have been made to reflect the change."

Niagara Rate Increase Hit

A NUMBER of industrial users of electric power met recently to protest plans of Niagara Mohawk to seek a rate increase. The company had announced it would apply to the state public service commission for permission to raise the rates of 25-cycle power.

The company said the destruction of its Schoellkopf power station on June 7th by a rock fall in the Niagara gorge necessitated higher rates.

The consumers said in a statement that they would oppose any increase. They said the proposal was "exorbitant" and "not justified by the circumstances relating to the loss of the Schoellkopf station."

Suggests State Action to Cut Strike Threats

THE New York Transit Authority recently suggested that the state legislature enact for the authority and its employees a "little Railway Labor Act," similar to the federal law governing railway labor relations.

Joseph E. O'Grady, labor member of the three-man authority, told reporters after the authority's regular meeting early this month he hoped such a law would establish "orderly" dealings between the

authority and its unions, and would relieve the public of strike threats "every time somebody wants to organize."

Mr. O'Grady, outlining the proposed labor legislation, said it should direct the authority to recognize unions, which it now does on a voluntary basis. The law, he said, should give transit workers, though they are civil servants, the right to organize for purposes of recognition. It should also, he said, stipulate that both the unions and the authority are obligated to bargain collectively and to respect their contracts.

North Carolina

Co-ops May Build Own Power Plant

NORTH CAROLINA rural electric co-operatives are seriously considering the construction of their own generation and transmission facilities to serve the 32 electric co-ops in the state, it was declared recently by Alton Wall, president of the Eastern North Carolina Electric Membership Corporation, a wholesale bargaining agent for 17 co-operatives.

In addressing a session for electric co-operatives at the American Institute of Co-operation meeting at North Carolina State College, Wall said a committee was studying the possibility of enlisting the other 15 of the state's electric co-ops in the federation. Wall said the tremendous power needs of the near future, and the difficulty that co-ops have had in obtaining wholesale power at favorable rates from private companies, led to the study of the possibilities of generation and transmission operations owned by a federation of co-operatives.

Ohio

Gas Rate Ordinance Approved

AN ordinance contract providing for an increase of 6.1 per cent in domestic gas rates was approved by the Columbus city council last month for submission to local voters at the November election.

The council also authorized the start of negotiations "as soon as possible" on a new electric rate measure. Existing Columbus gas and electric rate ordinances expire in November.

Although the gas rate increase was less than half of the 14.8 per cent boost sought by Ohio Fuel Gas Company, a company spokesman said the firm would accept it if voters approve. He said the company would not appeal to the state public utilities commission. However, if the voters fail to approve the 6.1 per cent increase, the company could go to the state commission for a boost.

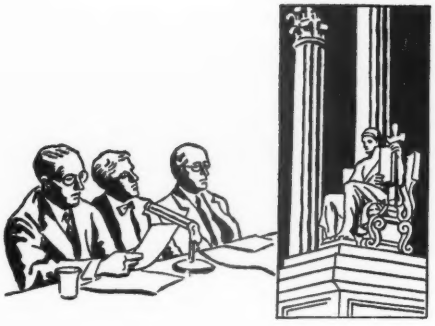
An escalator clause in the contract provides that in the event of wage hikes beyond a certain point, consumers would foot half of the bill.

Texas

Buys Pipeline Firm

HOUSTON NATURAL GAS COMPANY recently announced it had purchased the Houston Pipeline Company for $26,000,000.

John H. Wimberly, president of Houston Natural Gas, announced the purchase and said it would "virtually double" Houston Natural Gas and make the firm a completely integrated utility company with its own production, transmission, and distribution facilities.



Progress of Regulation

Trends and Topics

Stock Dividends

STOCK splits and stock dividends, increasing the number of shares without increasing a stockholder's proportionate interest in the company, seem to please investors. Two recent decisions present differing views as to the propriety of a stock dividend. The Connecticut commission denied approval and the Wisconsin commission granted approval.

The Connecticut case involved a proposal by the Stamford Water Company. The commission said it was important to note that since the original passage of the applicable statute in 1935 all Connecticut public service companies had consistently pursued the policy of issuing new stock only for property or money. The application of the Stamford Company was termed a "departure from this sound policy." The commission said that denial of authority to issue a stock dividend would preserve for future financing a sound financial structure and enable the company more readily to attract new capital on more advantageous terms when necessary (13 PUR3d 601).

The Wisconsin commission authorized a telephone company to issue $50,000 par value of common stock as a stock dividend. The company had accumulated $101,987 of undistributed surplus. The company's plan contemplated the immediate declaration and distribution of a 4 per cent stock dividend (amounting to $12,000 par value) to stockholders of record and issuance of the balance from time to time as declared by the board of directors. Therefore, because of the possibility that part of the stock dividend would not be declared and distributed until some future and presently undetermined date, authorization was made subject to the condition that an amount of the surplus account equal to the undistributed stock dividend should not be available for cash dividends. *Re Urban Teleph. Co. 2-SB-643, June 28, 1956.*

The United States Supreme Court, in 1890 in the case of Gibbons *v.* Mahon, 136 US 549, stated in simple language that a stock dividend is a distribution of surplus in the form of additional shares of stock rather than in cash and

that it "takes nothing from the property of the corporation, and adds nothing to the interests of the shareholders." Most stock dividends have been based upon undistributed earnings invested in property, but value has been considered in some cases.

Statutory Restrictions on Stock Dividends

The statutes of the different states are pertinent as well as questions of public policy and financial advantage. In some states the statutes relating to security issues have been construed as prohibiting the issuance of stock dividends, while in other states no such obstacle to stock dividends has been noted.

The California commission, in several cases, disclaimed power to authorize the issue of stock for the purpose of paying a stock dividend, although it considered it proper to authorize the issue of stock for the purpose of reimbursing a company's treasury because of earnings invested in the properties and business of the company. The commission added that "if such order is made the company thereafter can distribute the stock as a stock dividend" (PUR1925A 218; PUR1926C 774; PUR1926D 50). Several years later, in 1939, the commission approved the issuance of common stock to reimburse a company's treasury, with the statement that "the stock which applicant desires to issue will be distributed to its stockholders as a stock dividend" (32 PUR NS 255). The result would be the transfer of the amount of reimbursement from surplus to the capital stock account. The company stated its intention not to declare any cash dividend unless its net current assets were equal to the stated value of all of its outstanding stock.

The Indiana commission, in 1920, ruled that a company could not legally issue a stock dividend, as such, in view of a statutory provision: "No public utility shall issue any stock or certificate of stock, except in consideration of money or of labor or property at its true money value as found and determined by the commission actually received by it" (PUR1921A 193). The commission in 1955, however, authorized Central Indiana Gas Company to issue common capital stock as a stock dividend, overruling, without discussion, a motion to dismiss the proceeding on the ground that the commission had no jurisdiction to approve the proposal (No. 25851, April 15, 1955). The company would concurrently transfer an appropriate amount from its earned surplus account to its capital stock account. The commission said this would freeze that amount of the earned surplus and thereby make it unavailable for the payment of cash dividends in the future, would substantially increase the ratio of the capital stock account to the total amount of mortgage bonds of the corporation outstanding, and would probably be helpful to the company in selling additional mortgage bonds on reasonable terms in the future for the purpose of paying for proposed additions and betterments.

In the District of Columbia stock dividends are not permitted, because of a statutory prohibition. The District commission, in authorizing the Potomac Electric Power Company to issue and sell common stock to a parent company for cash at par, said that this would not amount to a stock dividend, to

the extent of the value of the shares in excess of their par value, contrary to the statutory provision reading: ". . . no public utility shall declare any stock, bond, or scrip dividend or divide the proceeds of the sale of any stock, bond, or scrip among its stockholders" (44 PUR NS 277). A similar decision was made in a case involving the Chesapeake & Potomac Telephone Company, which proposed to issue and sell stock to a parent holding company at par value (46 PUR NS 416).

Earned Surplus Basis for Stock Dividend

An accumulated surplus, said the North Carolina commission, rightfully belongs to the stockholders, and when a company contemplated issuing additional common stock to the public, the equity of a sole stockholder might be protected through the issuance of a stock dividend (9 PUR3d 308). This was in harmony with earlier decisions by that commission to the effect that when a company over a period of years, through economical management and good business foresight, has accumulated a surplus, which could have been distributed to stockholders but was expended for improvements, it should be permitted to issue a stock dividend (16 PUR NS 258; 25 PUR NS 409).

A stock dividend, said the Nebraska commission, may be issued to present stockholders contemporaneously with the sale of additional stock when such dividend represents sacrifices made by present stockholders, by way of unpaid dividends, as earnings were reinvested (PUR1924A 792). Other state commissions which have authorized the issuance of stock dividends to the extent of reinvested earnings include: Arizona (PUR1920D 609), Illinois (Re Public Service Co. of Northern Illinois, No. 38946, December 5, 1950), Maine (PUR1916C 603; PUR1917A 669), Missouri (PUR1921C 653), Ohio (PUR1951E 79), Pennsylvania (12 PUR NS 173; 16 PUR NS 280), Wisconsin (PUR1931C 439; 22 PUR NS 1; 10 PUR3d 176).

The Securities and Exchange Commission, as part of a plan for termination by a corporation of its holding company status, permitted the distribution, as a dividend, of stock of a subsidiary (83 PUR NS 197). The commission in the Detroit Edison Company case allowed a stock dividend where the surplus was considerably in excess of the par value of shares issued (68 PUR NS 47).

Value as Affecting Stock Dividend

The New Jersey commission, in an early decision, declined to authorize the issuance of a stock dividend except to the extent that the actual value of the property exceeded the present capitalization (PUR1915E 72). But later, in approving the issuance of a stock dividend by the Toms River Water Company, the commission declared that dividends in the form of stock must be based upon earnings invested in capital assets—earnings which might otherwise have been distributed as dividends. The commission found no justification for the issuance of stock representing merely an appreciation in value

due to costs of construction higher than those prevalent at the time the property was built (PUR1923C 230).

The Nebraska commission, in 1921, authorized a stock dividend to finance property value in excess of outstanding securities. The statute authorized the issuance of securities, among other things, for the discharge of obligations. The commission said: "Is it not a reasonable interpretation of this chapter to conclude that the company owes to its stockholders the value of the water power which came into the company at the time the corporation was organized in 1915, and that that obligation has not as yet been discharged? May we not say that such discharge of obligation is 'reasonably required for said purposes of the corporation'?" The commission said that to hold otherwise would be to say that stockholders who had returned earned dividends into property might not claim the evidence of such additional investment as a stock dividend (PUR1921C 678).

The Michigan commission denied an application by Detroit United Railway, in 1921, to issue a stock dividend when the company's value was questionable, since it was in bankruptcy. The commission raised the question whether a street railway company should be permitted to declare a stock dividend because "sometime in its prosperous past it invested surplus earnings in property" (PUR1922B 815).

Review of Current Cases

Court Declines to Require Fair Value Rate Base

A TENNESSEE chancery court refused to grant Southern Bell Telephone & Telegraph Company, pending regular appeal, an injunction against a rate order (12 PUR3d 170) which the company contended was confiscatory because it was based on an original cost rate base instead of a present fair value rate base. The rate of return being fixed at 6.1 per cent, Southern Bell would secure substantially less revenue under the original cost rate base than would be allowable under a present value rate base.

The commission was empowered by statute to determine "just and reasonable" rates and "from time to time to appraise and value the property of any public utility."

The company claimed that this language required the use of present fair value. The court, on the contrary, held that the statute did not mean that a present fair value rate base must be used but required merely that the commission determine "just and reasonable" rates. Furthermore, the court said, the legislature contemplated that the concept of what is "just and reasonable" might change with social trends.

Nor did the company's petition on its face make out a case of confiscation. Although confiscation was alleged, the petition, in effect, amounted only to a complaint that the company was not allowed as large a return under the rate order as the legislature had authorized. This did not necessarily constitute confiscation.

Since the decision in the Hope Natural

Gas Case, said the court, there is no longer any constitutional requirement that rates be based on present fair value. The courts will no longer consider any particular method of determining rates. They are now concerned only with the result, or the "total effect," of a rate order. If the order is reasonable on any grounds at all, it will not be held to be confiscatory and therefore unconstitutional.

Since the company's petition did not demonstrate that the total effect of the rate order was not "just and reasonable," it perforce failed to show that the commission had not observed the statutory rate-making standard. A case for injunctive relief was not made out. *Southern Bell Teleph. & Teleg. Co. v. Tennessee Pub. Service Commission et al. April 23, 1956.*

Original Cost Valuation and Hypothetical Debt Ratio Required in Telephone Rate Case

REAFFIRMING its view that original cost is the most acceptable valuation basis for rate making, the Wyoming commission authorized Mountain States Telephone & Telegraph Company to increase rates by an amount calculated to result in a rate of return of 6.65 per cent on an average net investment (original cost) rate base. A "present value" rate base proposed by the company was rejected as inequitable to subscribers.

The commission observed that revenue requirements can better be adjusted by changing the rate of return from time to time than by changing the rate base formula. A projected test period for the current year was considered necessary in view of the effects of inflation and attrition and the prospective application of rates.

Debt Ratio and Rate of Return

The company's actual debt ratio was only 27 per cent. This being considered unreasonably low, the commission adopted a hypothetical debt ratio of 38 per cent for the purpose of determining a proper rate of return in relation to the cost of capital.

The company sought a rate of return of 6.84 per cent on the basis of the average net investment rate base. This was found to be excessive and therefore reduced somewhat, notwithstanding that 6.89 per cent was allowed in the commission's last rate order respecting this company. In fixing the rate of return, the commission took into consideration several factors bearing importantly upon the issue: the current tendency of prices to become stable, the effect of the company's construction program as a partial offset to attrition, and the probability of increased future earnings as a result of conversion of exchanges to dial operation. The 6.65 per cent rate of return, however, was expressly disavowed as a precedent for future rate proceedings. All future rate cases, said the commission, must be decided on their merits and in the light of attending conditions.

Expense Items

Depreciation expense based on Federal Communications Commission depreciation rates was approved. Similarly, relief and pension expense representing irrevocable payments to a fund trustee in accordance with actuarial requirements was included in operating expense.

Claims for municipal exactions "that may be imposed" and other future ex-

pense increases were denied. They were found to be merely conjectural and therefore not appropriate for consideration in a rate proceeding. *Re Mountain States Teleph. & Teleg. Co. Docket No. 9307, July 18, 1956.*

Pipeline Company Entitled to Restitution after Payment of State Commission's Invalid Minimum Price to Supplier

A UNITED STATES district court held that a pipeline company, which had made payments to its supplier under protest, was entitled to restitution of the amounts paid, less royalties paid by the supplier and less increased production taxes.

The protested payments had been made after the Oklahoma commission had fixed minimum rates higher than the contract rate in effect between the parties. After the United States Supreme Court had held the commission order invalid (8 PUR3d 7) on the ground that such regulation was exclusive to the Federal Power Commission, the pipeline company sought restitution of the difference between the contract rate and the price paid.

The supplier contended that to permit recovery of the difference between the contract price and the amount paid under the invalid order would, in effect, be enforcing the price provisions of the contract as the rate for gas during the period in question. Since, in retrospect, the supplier was a natural gas company, its rates could be valid only after filing with the Federal Power Commission and, since the contract had never been so filed, the prices were ineffective.

The court answered that it was a matter of common knowledge that the federal commission itself did not know or believe that it had jurisdiction over the prices charged by gas producers for their product until the historic Phillips Petroleum Case (3 PUR3d 129). Not having any knowledge of commission jurisdiction at the time, the failure to file did not have the effect of preventing the price provisions of the private contract from becoming binding as between the parties.

The court concluded that in making the excess payments, the pipeline company involuntarily did so under the coercion of business duress. It had been confronted with an apparently valid order of the state commission which in terms forbade its supplier from supplying gas unless the designated price was paid.

Overt threats by the supplier were not essential for the existence of business duress. The commission order itself was sufficient to lead the pipeline company into believing itself in imminent danger of having an important supply of gas interrupted if it did not accede to the order fixing the price.

The supplier had not discouraged this belief.

The remedy of "restitution," pointed out the court, was a branch of the more general "money had and received," based on the proposition that where one had received money from another under such circumstances as to make it unjust and inequitable for him to retain it, restoration might be required.

The principle of business duress had been applied to permit recovery of payments made under compulsion of an administrative order later held invalid in other cases. The same principle was applicable here, and the court had the duty to limit the recovery to the amount which, under the circumstances, in equity and in good conscience, should be restored. Since

part of the excess payments were paid out as royalties and gross production taxes, the recovery was reduced by the amounts so paid out. *Natural Gas Pipeline Co. v. Harrington et al. 139 F Supp 452.*

Court Upholds FPC Order Prescribing Pipeline Zoning In Place of Discriminatory Uniform Rates

THE decision of the Federal Power Commission that the uniform rates of Northern Natural Gas Company were unduly discriminatory and preferential, and that zone rates should be applied (9 PUR3d 8), was upheld by a federal court of appeals.

Northern's pipeline system extends from fields in Texas, Kansas, and Oklahoma to a point near St. Paul and Minneapolis. Some gas is purchased from a subsidiary. Gas is sold to distributing companies along the pipeline. Three zones were established by the commission in direct proportion to distance of transmission. A rate differential of 3.06 cents per Mcf was indicated between the intermediate zone and the zone most distant from the source of supply. A smaller differential, however, was ordered on an interim basis.

Jurisdictional Questions

Northern and other opponents of zoning urged that the establishment of zones and rate differentials involved an increase of rates in zone 3 (the most distant zone) beyond the rate for the same area contained in the currently effective schedule, and that the commission had no jurisdiction under § 5 (a) of the Natural Gas Act. But Northern's uniform rates being found discriminatory and preferential, the commission's jurisdiction was complete. It was not precluded from ordering a rate increase in zone 3, through the use of an approved differential, in order to balance a reduction of revenues in another zone. Where discrimination is found to exist, said the court, the commission is fully empowered to eliminate it by establishing zoning and rate differentials.

Observing that the commission had formerly approved uniform rates, the company asserted that the commission was now precluded from establishing zones and differential rates. The court disagreed. This was the first proceeding in which the commission had made what it deemed to be a sufficient study of the facts to enable it to make a positive finding that Northern's uniform rates were in fact discriminatory.

Distance Factor Controlling

The company contended that there was insufficient evidence to support the commission's findings that the distance of transmission of gas was the controlling factor in determining the cost of transmission, and that uniform rates were discriminatory on that basis. The evidence indicated that transmission expense constituted 55 per cent of Northern's total cost of service and 96 per cent of the total for items other than gas production expense.

In deciding that there were no other circumstances to counterbalance the distance factor, the commission had given consideration to the agreed cost of service, the distribution of sales and volume sold along the line, the load factor of such sales, and the comparative benefits to customers of the principal market area resulting from the lower unit cost of transmitting large volumes of gas. The court held that the

commission's determination was amply supported.

Notice and Hearing

In order to avoid inequalities inherent in the proposals advanced by proponents of zoning as well as those presented by the commission staff, the commission departed somewhat from the precise boundary lines proposed in the hearings and fixed other lines more closely in accord with its finding that the distance of transmission was the controlling factor in the allocation of costs. The company insisted that the commission denied due process of law in not giving notice and holding a hearing in respect to the particular zones which it contemplated establishing.

The court ruled that no such notice and hearing were required, although they might have been appropriate. The evidence was sufficient to enable the commission to establish the zone lines without another hearing. The function of the commission, in addition to applying its expert judgment, the court said, is to appraise facts and draw inferences from them. Its decisions on the zone lines did not have to be based directly on the proposals presented. The commission, after considering all the evidence presented, acted within its power in establishing zones in accordance with the allocation of transmission costs on a mileage basis, even though there was evidence otherwise bearing upon the issue, particularly respecting volume of gas sold, size of pipes used, annual load factor, and competition from other fuels.

Competition and Construction Items

The court sustained the commission's finding that the evidence was not convincing that zoning and rate differentials would result in a loss of industrial sales to competitive fuels. The evidence was meager and did not compel a conclusion contrary to that of the commission.

Finally, the company complained that the commission did not allow for the value of construction in progress, which was completed only after the hearings. The court considered this no grounds for reversal. There is no reason, said the court, to infer that the new construction changed the basic conclusions upon which the commission acted. *Interstate Power Co. et al. v. Federal Power Commission, Nos. 15412, 15424, July 9, 1956.*

Telephone Company Denied Right to Borrow from Equipment Manufacturing Company

THE Arkansas commission denied an independent telephone company's application to borrow funds from a manufacturer and supplier of telephone equipment pursuant to a mortgage loan agreement. The company proposed to use the funds to convert its present common battery system to dial service and to extend service into rural areas. The commission found that the company had no assurance that it could borrow additional funds for expansion of its facilities to render area coverage as the demand might arise. The company might, therefore, be unable to meet its obligation to serve the area.

The commission also believed that the company would be morally obligated to buy equipment as needed from the supplier. This would, in effect, eliminate competitive prices, which could be burdensome to the company's future subscribers.

Mortgage Provisions

The mortgage provided that it would

cover presently owned and after-aquired property of the company. It also contained covenants restricting the company's ability to borrow money, sell or lease its assets, increase salaries of its management, or pay dividends. The commission believed that certain of these provisions constituted an attempt to substitute judgment of the loaning company for the regulatory power of the commission.

Prepayment Provisions

The loan agreement provided for monthly instalments covering principal and interest over a 20-year period. It provided for a prepayment premium of 4 per cent for the first year, and this was to be reduced by one-eighth of one per cent each year throughout the life of the loan. The prepayment fee applied to all prepayments of principal, including prepayments that might be made out of the proceeds arising from insurance recovered from casualty loses.

The state commission said that while it is not opposed to reasonable prepayment fees, it believed the requirements in this particular instance were too severe. *Re Berryville Teleph. Co. Docket No. U-1093, May 29, 1956.*

Accounting Procedure for Accelerated Depreciation Uses Restricted Surplus Account

THE Virginia commission, upon application by a telephone company, prescribed an accounting procedure for the tax results of accelerated depreciation under § 167 of the Internal Revenue Code of 1954.

The code authorizes three methods of determining depreciation for federal tax purposes: the straight-line method, the declining-balance method, and the sum-of-the-years-digits method, besides other consistent methods having results similar to the declining-balance method.

The effect of accelerated depreciation, the commission noted, is to defer the payment of a portion of federal income taxes from the early years of property life to the later years. The legislative purpose is to encourage and stimulate new investment and economic activity by providing funds for new construction and facilities.

The opinion expressly indicated, however, that the authority thus granted would not be binding on the commission in any subsequent rate or other proceeding.

Accounting Entries

The company was directed to account on its books for properties subject to accelerated depreciation in the same manner as for its other properties, and to accrue depreciation therefor at rates consistent with its rates for like properties not subject to accelerated depreciation.

During the years when a tax deferral results from the use of such depreciation, the company would be required to charge the deferral to "Provision for Future Federal Income Taxes" and correspondingly credit "Earned Surplus Restricted for Future Federal Taxes on Income." Beginning with the year when accelerated depreciation allowances are less than under normal methods, the resulting tax increase would be charged to the restricted earned surplus account until it is exhausted, while a corresponding credit is made to "Current Federal Income Taxes Deferred in Prior Years." *Re General Teleph. Co. of the Southeast, Order No. 12848, December 14, 1955.*

Reserve Account Prescribed in Accounting Procedure For Accelerated Depreciation

THE New Mexico commission approved an accounting method proposed by a telephone company for accelerated depreciation and its tax effects.

The method was also authorized for accelerated amortization of defense facilities.

Assuming constant tax rates, said the commission, the total tax liability over the life of property is at least as great under the accelerated methods as under straight-line depreciation. There is only the difference that a smaller amount of taxes will be paid during the early part of property life and a larger amount during the later part, if accelerated depreciation is employed.

The procedure was not restricted to use for accounting purposes but was expressly made applicable to use for rate determination purposes as well.

The commission required the company to account on its books for that portion of its properties which are the subject of accelerated depreciation in the same manner as for its other properties, accruing depreciation at rates applicable to property not depreciated under the accelerated methods.

Accounts entitled "Provision for Deferred Federal Income Taxes," as a separate account under "Operating Taxes," and "Reserve for Deferred Federal Income Taxes" were prescribed for use during the early years of property life when tax deferrals will occur. During the later years of property life, charges and credits would be made to the reserve account, until depleted, and to "Current Federal Income Taxes Deferred in Prior Years," respectively. *Re General Teleph. Co. Docket No. 368, May 28, 1956.*

"Permanent Savings" under Accelerated Depreciation Recognized in Accounting Order

IN setting forth a procedure to be followed by an electric company in accounting for accelerated depreciation, both for accounting purposes and future rate proceedings, the Kansas commission discussed the possibilities of what, for practical purposes, are permanent tax savings derived from the use of accelerated depreciation.

Accounts Prescribed

Accelerated methods of depreciation, it was observed, tend to cause fluctuations in periodic aggregate depreciation allowances which, if accounted for on a utility's books, would not be consistent for rate-making purposes. Hence, the company was directed to account on its books for properties subject to accelerated depreciation in the same manner as for other properties, and to accrue depreciation at normal rates.

A reserve account for deferred income taxes was ordered to be credited with tax deferrals during the early life of the property depreciated. Charges representing tax increases resulting from depreciation allowance reductions would be made to the reserve account during the latter period of property life. A "Provision for Deferred Federal Income Taxes" account would be charged during the early period, and an account entitled "Portion of Current Federal Income Taxes Deferred in

Prior Years" would be credited in the latter period.

Deferral and Cumulative Effect

When accelerated depreciation is applied to a single unit of plant or to additions for a specific year, it has the effect merely of reducing income taxes during the early life of the property while creating a future tax liability. In such circumstances there would be no permanent savings, though interest-free funds would be available for a time.

But if accelerated depreciation is applied to continuing plant replacement or growth, assuming no change in tax rates, the high depreciation allowances during the early period will not be offset by correspondingly lower aggregate allowances in subsequent periods. To the extent that such allowances are not fully offset, said the commission, proportionate amounts of the resulting income tax reductions may for practical purposes be considered as "permanent savings." Permanent interest-free funds may therefore become available.

Capital Cost Reduction

The benefits do not redound exclusively to the utility, the commission noted, for consumers may share in them too, at least indirectly. Where the cumulative effect of accelerated depreciation obtains, at least temporary percentage reductions in the company's over-all cost of capital will occur because of the interest-free funds. Any such benefits would, of course, be matters for the commission to consider in subsequent rate proceedings.

Records Required

The commission recognized, however, that tax rates might in fact vary from time to time, that the provisions of the law might be modified, and that the utility might not elect to continue applying accelerated depreciation methods indefinitely.

By any of these possibilities the cumulative effect would be affected.

It was declared to be imperative that the applicant company maintain records which will correctly reflect the current and cumulative effect of accelerated depreciation applied to its properties. The commission indicated that such records should keep data relating to the company's Kansas operations available for use in annual reports and in future rate or other proceedings. *Re Kansas City Power & Light Co. Docket No. 50,644-U, May 16, 1956.*

Contract Demand Rate Form Established for Gas Pipeline Together with Refund Rates

REVERSING a presiding examiner, the Federal Power Commission authorized the Ohio Fuel Gas Company to establish a contract demand rate form designed to stabilize recovery of demand charges and to encourage control of peak demands by distribution company customers. Rates applicable to a refund period were also established.

In recent years Ohio Fuel has been beset by a tremendous increase in space-heating load by ultimate consumers. With consequent high-peak requirement increases, the year-to-year fluctuations in recovery of costs collected through demand charges have tended to become more accentuated by weather conditions. The commission declared that a rate form which does not recognize this situation and bring a measure of stability in re-

covery of these costs collected through demand charges is unreasonable.

Under the contract demand rate form, billing demand would be determined on the basis of customers' single day peak during a 12-month period but would not be less than 90 per cent of the contract demand. Customers taking less than 5,000 Mcf on peak day would be eligible to purchase under a small general service rate schedule containing a straight commodity rate of 45 cents per Mcf, which was slightly less than a straight commodity rate for all wholesale customers.

Besides affording needed stability, uniform application of a contract demand rate form would tend to diminish discrimination among customers. Customer companies would be protected by a provision which would permit them to reduce their contract demands in two successive 5 per cent stages as a matter of right, and to claim further reduction conditionally.

Refunds and Cost of Service

A rate increase proposed by Ohio Fuel had earlier been allowed to go into effect subject to refund as of March 1, 1954. In this proceeding the commission established the rates for the refund period. The new rates would, of course, determine the amounts of the refunds to be paid.

Particular attention was given to several items in the presiding examiner's calculations. The commission declined to allow documentary stamp tax expense as an expense item in the cost of service. The examiner was upheld in treating an item reflecting an increase in property taxes for the year following the test year as an expense in the cost of service. The item was properly included because it was a known cost.

Ohio Fuel, jointly with an affiliate, made purchases of gas from a supplier at significantly less than 100 per cent load factor. The demand charges in the cost of gas purchased, said the commission, should have been classified as a demand element in Ohio Fuel's cost of service. The commission agreed with the examiner's classification of depreciation, return, and taxes relating to the company's LPG plant, which was used for peaking purposes, to the demand component. Similar costs with respect to the company's own production were properly classified to the commodity component.

The commission arrived at a rate for the future of $1.56 per Mcf of demand and 32.45 cents per Mcf of commodity on a contract demand basis. This rate, covering Ohio Fuel's wholesale cost of service, included a 6¼ per cent rate of return. Different rates were prescribed for the refund period, which was divided into three parts, closely approximating the different costs of service during the period. Refunds were ordered to be made with 6 per cent interest. *Re Ohio Fuel Gas Co. Docket No. G-2281, June 29, 1956.*

Lessees of Gas-producing Property Excused from Compliance with Commission Regulations

THE New York commission decided that companies operating gas properties under lease were public utilities subject to its jurisdiction, but it exempted them from compliance with the commission's regulations except as to matters of public safety. These companies drilled wells and distributed gas to the lessors under contract arrangements.

The producing companies sold overage

not only to gas-distributing companies but to others pursuant to contracts, but they had no distribution franchises. These operations prevented their exemption under a statutory provision excepting producers selling gas only to distributing companies.

A statutory exemption is also made when the producer distributes gas through private properties solely for its own use or the use of its tenants and not for sale to others. The companies did not come under this exemption since the lessors were independent property owners and not tenants. No produced gas was for the use of the lessees.

The statute permits exemption from compliance with regulations relating to tariffs, accounting, etc., where a corporation supplies gas to less than twenty customers specified by the commission. Exemption from compliance with the regulations was made on that basis. *Re Reserve Gas Co. Cases 15189, 15190, June 26, 1956.*

Temporary Slump in Earnings No Reason for Rate Increase

An electric company's application for a rate increase was denied by the Maine commission, although its rate of return had dipped because of the addition of a new steam plant. The rate base had been increased, but the demand for the increased capacity had not occurred at once. The company's application was designed to provide an interim increase during the subsequent six months, at which time a more normal return was expected.

The commission pointed out that the company had been earning a good rate of return over the period of the last one, two, and three years. Its president had stated things would be all right in a matter of six months. Were the commission to adjust the rates for this interval at the company's request, it would also be duty bound to adjust rates similarly for the sake of the public every time the rate of return climbed a few brief months into the area above approximately 6 per cent. But neither the utility nor the public could fairly expect such constant and immediate revisions.

No corporation, business or regulated, said the commission, can expect an earning level without some brief variations. Public utility regulation removed some of the risks from the business of selling electricity, and principally the risk of competition of others in the same field and the same area. Yet, regulation by the state in the public interest made no guaranty of a particular return at all times under all conditions. The utility could not expect to operate so that it should be devoid of all risks and of all the vicissitudes of business enterprises.

Dividend-earnings Ratio

The company asserted that the practical reason for its application was that it desired to secure sufficient earnings so that it could meet current dividends without difficulty. The present dividend was $1.08 annually. A dividend pay-out of between 70 per cent and 80 per cent was good policy, in the company witnesses' opinion. Yet in 1954, when the company had a high rate of return and when it knew that shortly its rate would drop automatically upon the addition of a new plant, it had chosen to pay out 87 per cent of earnings in dividends.

During some quarters the pay-out had been over 90 per cent, and it had averaged 85 per cent.

Now the company acknowledged that the recent dividend increase was in error. Ordinarily, said the commission, how

much a utility chooses to turn over to stockholders in the form of dividends, rather than to plow back into the business, is a matter of management. Yet, if a utility in good times chose to adopt as a policy an unusually high dividend-earnings ratio, it could not fairly base a petition for an increase in rates the moment there was a dip in earnings upon the premise of maintaining that ratio. A cushion of retained earnings could be very helpful.

Fuel Clause Limited

The commission commented on the proposed fuel charge for residential customers.

Maine had had fuel charges in the electric field for industrial customers and other utilities, but not for residential. The commission did not believe that the cost-plus rate should at present be extended to that class.

Rates should generally be definite and certain, rather than fluctuating. Other states had refused to extend the clause to small residential customers.

The particular fuel charge proposed by the company was somewhat different from that in use elsewhere and was to have been dependent upon variables other than the price of fuel, such as water conditions and cost of interchanged and purchased power. The commission thought it would not be good policy to add such a charge for domestic customers. In the instant case, the new charge would provide only about a one per cent increase in revenues and did not appear to be meritorious. *Re Maine Pub. Service Co. F. C. No. 1482, May 4, 1956.*

Annexation of Portion of Service Area Not Bar To Continued Service by Co-operative

A LOWER court had construed the Texas Electric Co-operative Corporation Act to: (a) restrict distribution of electricity by co-operatives to lawfully admitted members; (b) restrict membership to persons residing in rural areas; (c) permit co-operatives to continue distributing electricity to members after an area becomes nonrural; and (d) permit co-operatives to serve members wherever they desire service, irrespective of whether the premises served are in a rural or a nonrural area. An electric co-operative and 54 similar corporations, as interveners, appealed to the Texas court of civil appeals from portions of the judgment. The appellate court, upholding in part and reversing in part, came forth with some pertinent comments on construction of the act.

Electric co-operatives once organized, said the court, cannot be restricted with respect to competition with commerical power companies. Competition must develop as areas served by co-operatives and power companies grow together and overlap. Exclusive territorial franchises are contrary to the Constitution and antitrust statutes.

Restrictions on co-operatives not imposed on commercial companies are not allowable, and the act does not limit the class of persons eligible to service by the co-operatives to persons residing in rural areas. The term "rural area" is any area not included within the boundaries of any city, having a population of not less than 1,500. The co-op could continue operation of lines and facilities which were originally constructed in a rural area after a portion had been annexed to a town having over 1,500 inhabitants. Such service was necessary, convenient, and appropriate.

The co-operative could also add new members. To hold otherwise, said the court, would be tantamount to granting a power company a monopoly for electric service, contrary to the public policy of the state. *Upshur Rural Electric Co-op Corp. et al. v. Texas ex rel. Southwestern Gas & E. Co. et al. 289 SW2d 819.*

Earned Surplus Deficit Written Off against Paid-in Surplus

THE Securities and Exchange Commission authorized a subsidiary transit company to write off its earned surplus deficit against its paid-in surplus account. The paid-in surplus had been created when the commission allowed the transit company to receive a donation from its parent company.

Subsequent to the donation, the city in which the company operated passed an ordinance requiring the company to abandon its streetcar lines and related equipment and to convert to bus service. In providing adequate reserves for property and equipment to be retained for use after conversion to bus service, an earned surplus deficit was created.

The commission observed that these accounting adjustments, together with the change to all-bus operation, constituted, in effect, a quasi reorganization which had been approved by the city council. The accounting adjustments had been approved by the company's directors and stockholders. *Re Dallas Transit Co. (Formerly Dallas R. & Terminal Co.) File No. 70-366, Release No. 13202, June 15, 1956.*

Other Recent Rulings

Preferential Payments. The California commission ordered a real estate development company to refund payments made by certain customers for installation of water facilities where the payments were preferential by virtue of the company having supplied the same facilities and service free to customers located in houses it had built. *Johnston v. Starter House Development Corp. Decision No. 53060, Case No. 5677, May 15, 1956.*

Motor Vehicle Rules Set Aside. The Indiana commission set aside rules and regulations it had previously approved, governing the lease and interchange of motor vehicles and their registration and identification, after the attorney general held such rules constituted a burden on interstate commerce and invaded a field of regulation pre-empted by the Federal Motor Carrier Act. *Re Rules and Regulations Governing Motor Vehicles, No. 26100, April 13, 1956.*

Refund to Gas Users. The Missouri commission authorized a refund plan for a gas company whereby the amount to be refunded would be divided proportionately to each class of customers for the period involved on the basis of the respective volumes of gas purchased by such customers during the period, the refunds being made in checks of the company at its expense, with a time limit of ninety days for presentation for payment. *Re Missouri Pub. Service Co. Case Nos. 12,937, 13,322, July 17, 1956.*

Agency Station Discontinued. The Missouri commission authorized a railroad to discontinue an agency station where convenience and necessity of the vicinity's residents did not justify continued out-of-pocket losses by the company. *Re Chicago, R. I. & P. R. Co. Case No. 13,284, April 12, 1956.*

Abandonment Request Denied. Giving primary consideration to the public need, the New Jersey commission denied an application of a railroad company for authority to abandon unprofitable passenger service, since the number of passengers using the facilities, though declining, was still substantial and substitute transportation was not satisfactory. *Re Delaware, L. & W. R. Co. Docket No. 8776, June 20, 1956.*

Carrier Applications Unsupported. Denying two applications for motor carrier authority because of insufficient proof as to public convenience and necessity, the Colorado commission pointed out that such applications, when protested, must be supported by customer witnesses who require and will use the proposed service. *Re Hayes (W. C.) (Hayes Water Service), Application No. 14002-PP-Amended, Decision No. 46072, June 28, 1956; Re Colburn Motor Tours, Inc., Application No. 14264-Extension, Decision No. 46073, June 28, 1956.*

Higher Rate for Nonresidents. The Washington supreme court held that a municipal water system had not breached its duty to fix nondiscriminatory rates by raising nonresident rates without increasing resident rates in order to finance expansion of the water supply to meet requirements within and without city limits. *Faxe v. City of Grandview, 294 P2d 402.*

Railroad Not to Substitute Motor Service. The North Dakota commission denied a railroad's request to discontinue certain trains and substitute motor carrier service therefor where public convenience and necessity required continued operation and a statute prohibited less than daily mixed train service on branch lines of railroads operating in the state. *Re Northern P. R. Co. Case Nos. 5327-5340, May 16, 1956.*

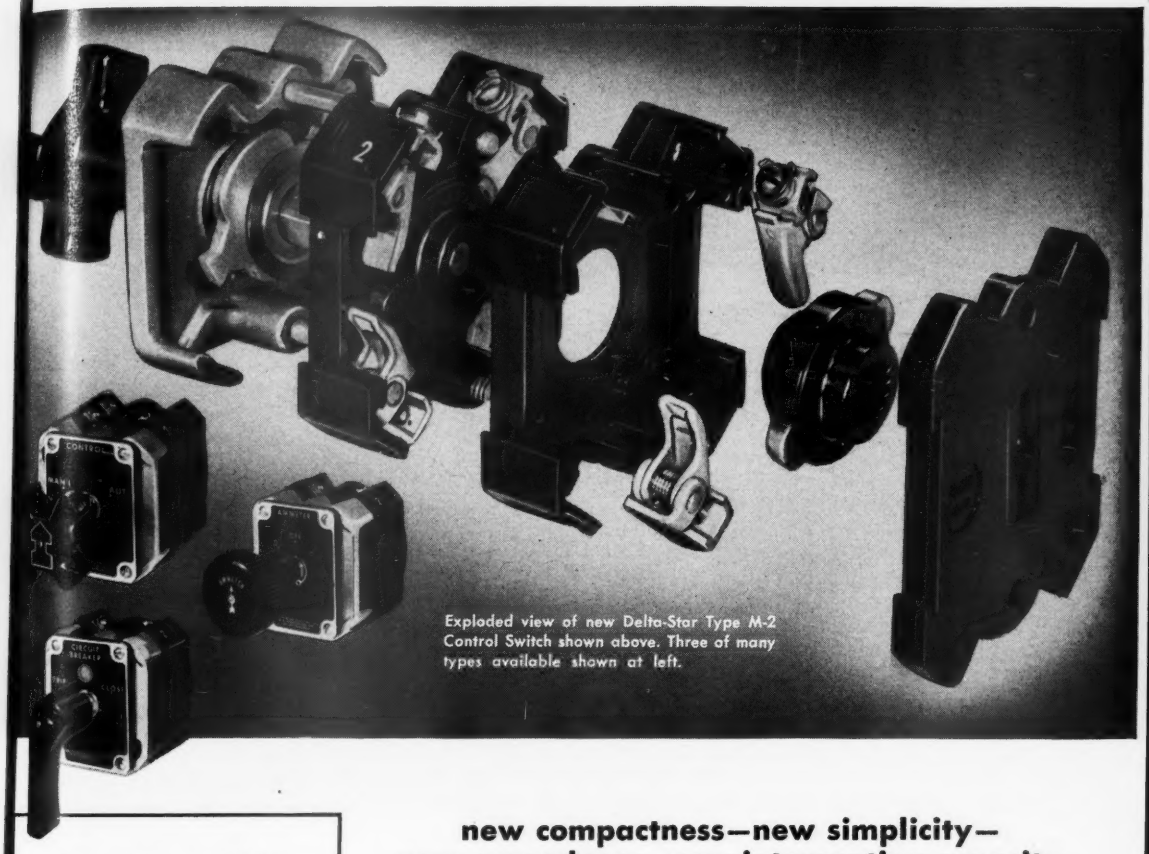
Transit Operating Ratio. The Colorado commission found that increased transit fares which would result in an operating ratio of approximately 93 per cent were not in excess of a reasonable return. *Re Denver Tramway Corp. Application No. 14280, Decision No. 45686, April 18, 1956.*

Transit Rate Increase. A transit rate increase was approved by the Massachusetts commission as proposed by the company, considering that the operating ratio would be only 98.7 per cent with the higher fares. *Re Nantasket Transportation Co. DPU 11755, July 11, 1956.*

Special Party Transportation. The New York commission adopted rules relating to the transportation of special or chartered parties by omnibus companies and contract motor carriers, wherein it was provided that where there is direct omnibus service between the origin and destination of a contemplated special party operation, the contemplated service may not be rendered by other than the omnibus company unless after notice to such company the commission grants a special permit. *Re Transportation of Special or Chartered Parties by Omnibus Corporations and Contract Carriers, Case 17594, June 5, 1956.*

ANNOUNCING...

Completely new, highly versatile Delta-Star Control Switches



Exploded view of new Delta-Star Type M-2 Control Switch shown above. Three of many types available shown at left.

Many types available including . . .

- Circuit Breaker Control
- Motor Control
- General Control
- Manual to Automatic Selector
- Ammeter Switches
- Voltmeter Switches
- Power Factor Meter
- Wattmeter
- Frequency Meter
- Regular Transfer
- Temperature Meter
- Synchroscope

new compactness—new simplicity—new ruggedness—new interrupting capacity

Look, inspect and double-check—you'll see why Delta-Star's new Control Switches offer new features that mean vastly improved efficiency, economy and service:

1. **Versatile**—available for many uses; switches are rated 20 amps. continuous rating with 250 amp. short-time (3-second) rating.
2. **Compact**—only 3⅞ in. high by 3¼ in. wide; new design permits easy wiring and quick inspection.
3. **Rugged and long-lasting**—combining heavy duty parts with customary Delta-Star quality construction.
4. **High interrupting capacity**—large terminal clearances and complete baffling between sections. At 250 volts a.c. on inductive circuits, single break contacts are rated 25 amperes, double break contacts 75 amperes.

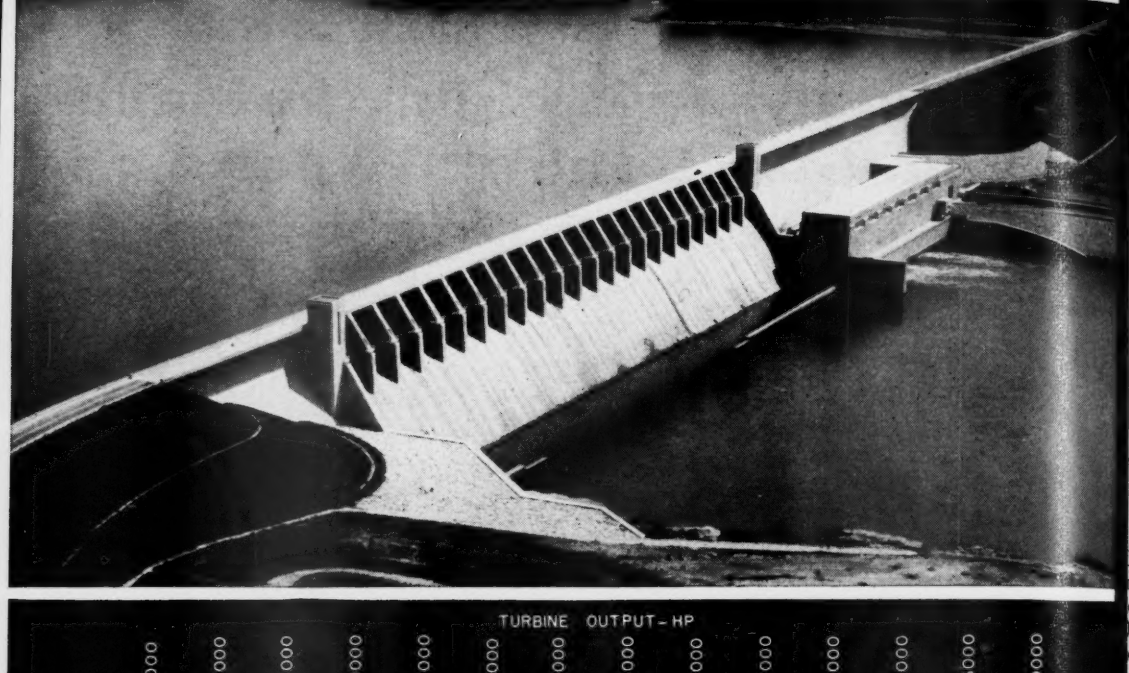
Now Delta-Star offers *premium* control switches at *regular* prices. Check them without delay—write or ask for Type M-2 Control Switch Price List 72-D4.

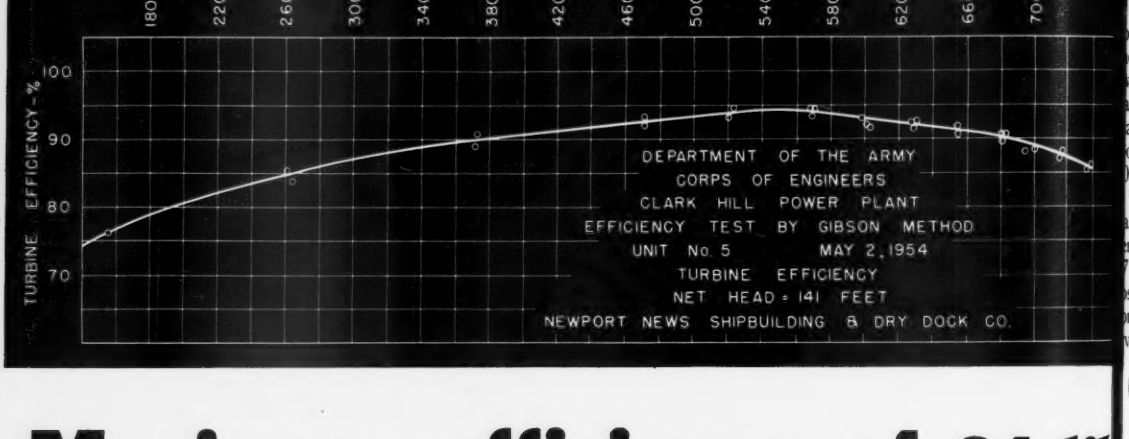
DELTA-STAR ELECTRIC DIVISION

H. K. PORTER COMPANY, INC.

2437 Fulton Street • Chicago 12, Illinois

District Offices in Principal Cities





Maximum efficiency of 94.1%

Reflects advanced practices at Newport News

THE GRAPH shows performance of a 55,000 horsepower turbine, one of seven such units built by Newport News for the Clark Hill Power Plant (see photo).

Shape of the curve is typical . . . not exceptional . . . for Newport News turbine performance. Regular, uniform, showing no-cut-off at full load, it indicates consistent delivery and stable operation.

And especially, experience in design and model testing.

At Newport News, turbine runners are continually being designed and redesigned for improvements in performance. And often upon receiving a contract for turbines, a model setting is built and complete tests made. So far, Newport News has filled turbine contracts with an aggregate rated output in excess of 7,000,000 horsepower.

Penstocks, spiral casings, valves, pumps, rack rakes and other essentials are also designed and built by Newport News. Our illustrated booklet, "WATER POWER EQUIPMENT," will be sent to you upon request.

Engineers . . . Desirable positions available at Newport News for Designers and Engineers in many categories. Address inquiries to Employment Manager.

Newport News

Shipbuilding and Dry Dock Company

Newport News, Virginia

Industrial Progress

Alabama Power Co. Plans $37,000,000 of New Facilities

LABAMA Power Company, a subdiary of the Southern Company, has ed applications to build about $37,-0,000 of new generating facilities on e Warrior river.

Plans call for erection of a 300-ot-high dam on the Sipsey fork of e Warrior river and installation of o generators with an ultimate ca-city of 160,000 kilowatts and in-allation of two new generators at overnment Lock No. 17, adding 45,-0 kilowatts to Lock 17's capacity.

The company obtained a prelimi-ry permit from the F.P.C. in De-mber, 1954. The Sipsey and Lock projects are in addition to projects sting about $120,000,000 which the mpany plans to build on the Coosa ver.

Kinney Named Applications Engineer for Logistics New York Branch

BBOT Kinney of Logistics Re-arch has been named |Applications ngineer in charge of the firm's New ork branch, according to an an-ouncement by Hugh F. Tracey, as-stant to the president of Logistics.

Mr. Kinney will represent the com-any's complete product line of elec-onic data processing equipment in-uding ALWAC digital computers.

Before assuming his new duties, r. Kinney had been Public Relations irector of Logistics Research.

Arizona Public Service Erecting Building for "UNIVAC"

ROUND was broken in July as Ari-ona Public Service Company started onstruction on a new $400,000 build-g designed exclusively for its Uni-ac, an electronic "brain."

The building will comprise 21,000 feet of floor space with 14,000 square feet on the ground level and 7,000 square feet on the second floor. The Univac operation will take up half of the first floor area.

A unique factor in the construction of the building will be a visitors' gallery. One wall of the Univac room will be glass from floor to ceiling to provide a viewing area for the public. This gallery will have low level illumination to give visitors a better view of operations. This type lighting also lowers the operator's visibility of spectators thus lessening the problem of distraction.

Kentucky Utilities to Add $15,443,000 Unit to Green River Station

KENTUCKY Utilities Company will add a $15,443,000 generating unit at its Green river generating station near Central City, bringing the total capability of the coal-fired steam electric plant to 265,000 kilowatts, R. M. Watt, K.U. president, announced recently.

The new 120,000-kilowatt unit, scheduled to be in service by mid 1959, will bring the total coal consumption of the plant, located in the heart of the Western Kentucky coal country, to 600,000 tons during its first year of operation with further increases in successive years.

Construction work on the new unit, the fourth K.U. has installed at the plant, is expected to begin early in 1957.

Because of its size and its location close to the coal mines which will supply its fuel, the new unit will have the lowest production cost of any unit in the company's generating system.

The new Green river unit will be the same size as the first generating unit at the E. W. Brown station of K.U., now under construction at Dix dam in Mercer county. The Brown station will have an ultimate capability of nearly 500,000 kilowatts.

The Green river station now has a capability of 145,000 kilowatts with two 35,000 KW units installed in 1950 and a 75,000 KW unit installed in 1954. K.U.'s other plant built since World War II is the 135,000-kilowatt Tyrone plant in Woodford county. A 35,000 KW unit has also been added at the Pineville plant.

Ebasco Appoints Byrne Assistant Manager of Sales

EBASCO Services Incorporated announced that William L. Byrne has been appointed assistant manager of the company's sales and public relations consulting department.

Mr. Byrne began his career with Nebraska Power Company in 1925, where he held such positions as lighting salesman, chief illuminating engineer, office manager, commercial sales manager, and sales promotion specialist.

He remained with the Nebraska Power Company until 1946, when he joined the Sales and Public Relations Department of Ebasco as a Marketing Consultant. In that capacity, he has had broad experience in general sales and marketing problems, market research and sales forecasting. He has worked with Ebasco utility clients both in the United States and abroad.

Fermi Reactor Plant Construction Underway

INAUGURAL ceremonies for Michigan's first atomic-electric power plant project were held recently at the construction site on the Lake Erie shore north of Monroe.

Official naming of the installation as the Enrico Fermi Atomic Power Plant highlighted the inaugural program. Dr. Enrico Fermi (1901-1954)

(*Continued on page* 22)

INDUSTRIAL PROGRESS
(Continued)

—the famed Italian-American phy cist in honor of whom the plant been named—was the first man demonstrate how the power of atom could be harnessed for practi use. The ceremonies took place actly one year, to the day, from time the Atomic Energy Commiss approved for negotiation the Pow Reactor Development Company's p posal to build Michigan's pioneer co mercial power reactor. A permit start construction was granted rece ly to PRDC by the Atomic Ener Commission.

Though formal inauguration of Fermi plant project had to await suance of the AEC construction p mit, much progress already has b made. Full-scale reactor parts for m chanical testing have been ordered a are being built at a cost of more th $2,000,000. These include the sta less steel vessel which will enclose reactor core; heavy shield, control a fuel-handling parts; and a centrifu pump powered by a 1,000-horsepow motor, capable of driving molten so um through the reactor at the rate 11,000 gallons a minute. These pa are intended for actual use in the pla after thorough testing for safety a performance.

Architectural and construction gineering contractors for the reac plant have begun work.

Detroit Edison has retained co struction engineers for a steam-t bine plant to be owned and operat by Edison and which will adjoin reactor unit. (Edison will operate turbine-generator on steam purchas from the reactor plant.)

The 150,000-kilowatt steam tu bine-generator to be used in conne tion with the reactor plant has be ordered by Detroit Edison.

Safety has been and will be the p mary consideration in every detail the design of the Enrico Fermi Ato ic Power Plant.

Some time after 1960, when full o erating capacity is reached, the Enri Fermi Atomic Power Plant is expec ed to supply the electric power nee of a quarter of a million people, a is intended to serve as the pattern f future atomic-electric plants throug out the nation.

A-C Releases "Reheat . . . and Today's High Temperature Steam Turbine" Leaflet

A NEW eight-page leaflet entitl "Reheat . . . and Today's High Tem perature Steam Turbine," discuss

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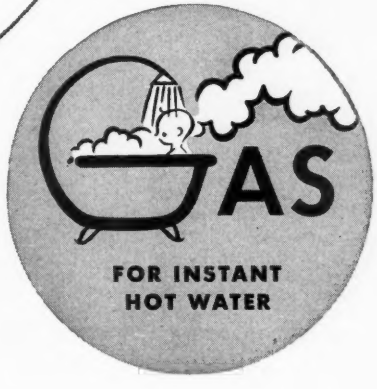
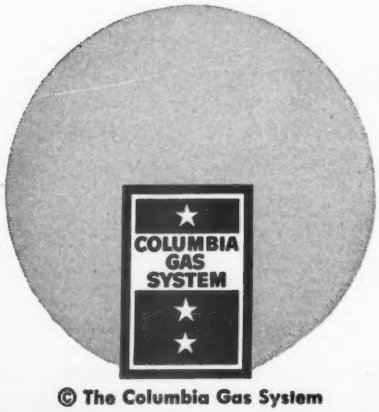


olumbia Gas System
delivers a modern miracle
24 Hours-A-Day!



CHARLESTON GROUP: United Fuel Gas Company, Atlantic Seaboard Corporation, Amere Gas Utilities Company, Virginia Gas Distribution Corporation, Big Marsh Oil Company, Central Kentucky Natural Gas Company; **COLUMBUS GROUP:** The Ohio Fuel Gas Company; **PITTSBURGH GROUP:** The Manufacturers Light and Heat Company, Binghamton Gas Works, Cumberland and Allegheny Gas Company, Home Gas Company, The Keystone Gas Company, Inc., Natural Gas Company of West Virginia; **OIL GROUP:** The Preston Oil Company.

the evolution of Allis-Chalmers reheat turbine designs and contributing reheat experience during the last 25 years. It is authored by C. D. Wilson, chief design engineer of the company's steam turbine department.

The leaflet carries numerous installation photos and cross section drawings of the units discussed as well as cross sections through a barrel-type turbine for supercritical pressure application.

The material concludes with the observation that "reheat is now being considered for nuclear power plants for an entirely different purpose—the same purpose for which it was originally used over 25 years ago. Steam pressures and temperatures obtained from the first nuclear reactors will be moderate. The problem of excessive moisture in the turbine exhaust will again require attention. Improved methods of moisture removal from the low pressure turbine will help, but reheat, either in the form of separately fired reheaters or steam heat exchangers—both of which are now receiving consideration—may play an important part in this newest development, the nuclear power plant of tomorrow."

Copies of the leaflet, No. 03R8467, are available on request from Allis-Chalmers Manufacturing Company, 965 S. 70th street, Milwaukee, Wis.

United Fuel Gas to Build $2,000,000 Operating Center

UNITED Fuel Gas Company, a Columbia Gas System, Inc., affiliate, announced it will build a $2,000,000 operating center near Charleston, W. Va.

Site of the new facility, to be known as the Charleston Group Operating Center, will be adjacent to the Chesapeake & Ohio Railway lines two miles northwest of St. Albans.

G-E Booklet on Interlocked Armor Cable

A NEW booklet on interlocked armor cable has been issued by General Electric's Wire and Cable Department.

This publication covers interlocked armor cable that is designed specifically for primary and secondary feeders in industrial power distribution systems and for generator leads, station auxiliaries, and station control cables in electric power stations.

Complete product listing, includi the components needed for a compl system are included in the book alo with installation information, and discussion of installed costs, mater handling and space requirements.

Publication number is 19-555 a it is available without charge fr Bridgeport.

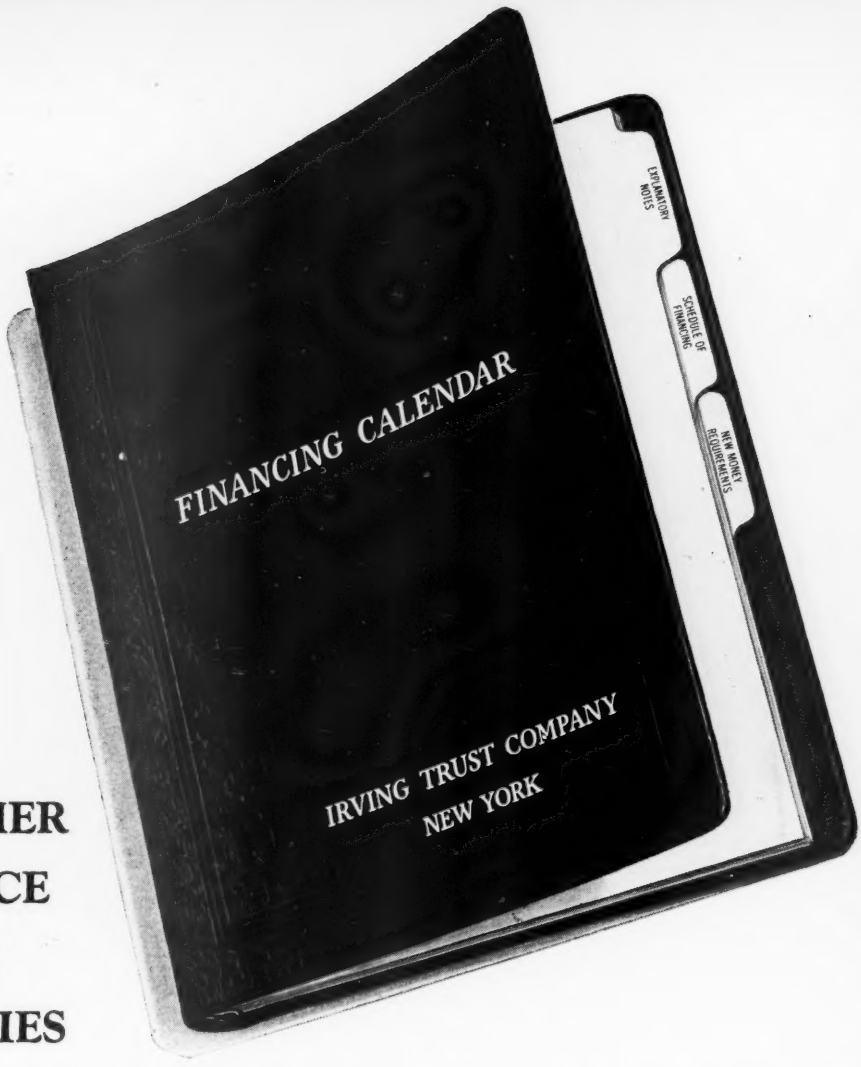
Gillespie Named Fleet Sales Manager for GMC Truck

APPOINTMENT of R. H. Gilles as fleet sales manager for GMC Tru and Coach Division was announc recently by R. C. Woodhouse, gene truck sales manager.

Under the general supervision of M. Gilroy, assistant general truck sa manager, Mr. Gillespie will direct expanded fleet sales activity fr GMC's home office in Pontiac, Mic igan.

Mr. Gillespie has been closely ass ciated with truck fleet operations a sales for the past 20 years and brin a wealth of experience to his new a signment. He succeeds A. S. McEv

(*Continued on page* 26)



ANOTHER SERVICE FOR UTILITIES

THE FINANCING CALENDAR

A comprehensive schedule of forthcoming security offerings, furnished regularly to utility companies to help prevent financing "log jams."

Better spacing of new offerings can mean higher prices to the issuers.

This service, available to the entire utility industry, has become feasible through the constant co-operation of the individual utility companies in furnishing their financing schedules.

IRVING TRUST COMPANY

One Wall Street, New York 15, N.Y.

Capital Funds over $126,000,000 — *Total Assets over $1,500,000,000*

WILLIAM N. ENSTROM, *Chairman of the Board* — RICHARD H. WEST, *President*

Public Utilities Department—JOHN F. CHILDS, *Vice President in Charge*

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

who will handle special assignments for the general manager.

Dravo to Install Atomic Energy Reactor at Shippingport

DRAVO Corporation, Pittsburgh, has been selected by Westinghouse Electric Corporation as installation contractor for an atomic energy reactor at Shippingport, Beaver County, Pennsylvania. This reactor will be the source of heat for the nation's first full-scale nuclear-powered electric generating plant which is now under construction.

Westinghouse is designing and constructing the nuclear portion of the plant under a contract with the United States Atomic Energy Commission. Duquesne Light Company is designing and building the electric generating facilities and will operate the entire plant.

Scheduled for completion in 1957, the Shippingport plant is designed for a minimum electrical output of 60,000 kilowatts. It will also be used by the AEC and private industry to extend knowledge of reactor physics, reactor construction, plant design and fuel characteristics.

Dravo will start work on its multi-million dollar installation contract immediately. In addition to the reactor itself the contract includes installation of many accessories such as steam generators, pumps, water purification system, and electronic controls.

Dravo's Marietta, Ohio, Pipe Shop will pre-fabricate certain of the piping assemblies required for the project.

McCaslin Reappointed Chairman Chamber Resources Committee

REAPPOINTMENT of Frank E. McCaslin, president of the Oregon Portland Cement Company, Portland, Ore., as chairman of the Natural Resources Committee, Chamber of Commerce of the United States, for the year 1956-57, has been announced by Chamber President John S. Coleman. Mr. McCaslin has headed the group for the past three successive years.

With representation from all parts of the country, the 43-member committee helps to guide National Chamber policy on issues including those affecting mining, coal, oil and gas, water resources, and electric power. The committee will meet in Houston, Texas, September 27th and 28th.

Besides Mr. McCaslin, other committee members and the industries they represent, include:

Electric Utilities: Paul V. Hayden, Vice Pres., The Conn. Light and Power Co., Hartford, Conn.; F. Gerald Irvine, Gen. Counsel, Utah Power and Light Co., Salt Lake City, Utah; Glenn L. Jackson, Vice Pres., The Calif. Oregon Power Co., Medford, Ore.; Ernest R. Mitchell, Mgr., Union Light, Heat and Power Co., Covington, Ky.; T. J. Rouner, Vice Pres., New England Power Co., Boston, Mass.; Lewis M. Smith, Pres., Alabama Power Co., Birmingham, Ala.; and Henry J. Sullivan, Asst. to the Pres., The Detroit Edison Co., Detroit, Mich.

Oil and Gas Producers: Rex G. Baker, Vice Pres. and General Counsel, Humble Oil and Refining Co., Houston, Texas; Fred W. Bartlett, Dir. of Production, Socony Mobil Oil Co., Inc., New York City; Robert R. Blackburn, Vice Pres. and Dir., Southern Calif. Gas Co., Los Angeles, Calif.; J. R. Butler, Senior Partner, Butler, Miller and Lents, Houston, Texas; James W. Hargrove, Vice Pres.-Sec., Texas Eastern Transmission Corp., Shreveport, La.; George V. Myers, Gen. Mgr., Production, Standard Oil Co. (Indiana), Chicago, Ill.; and George J. O'Brien, Vice Pres., Standard Oil Co. of Calif., San Francisco, Calif.

Brooklyn Polytech Honors Contributors To Utility Technology

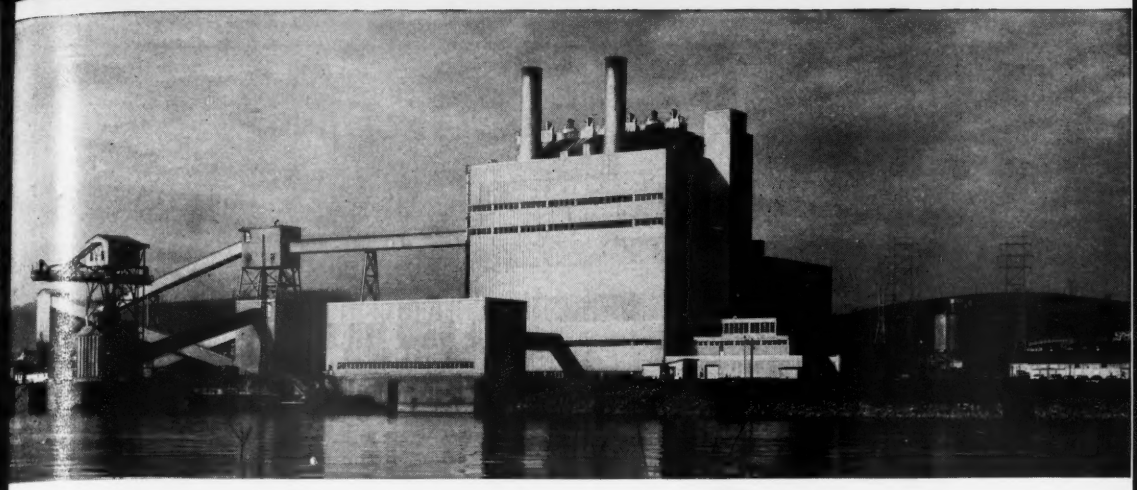
THE POLYTECHNIC Institute of Brooklyn, (N.Y.), in celebration of its first century, awarded Certificates of Distinction to a number of its distinguished alumni. Many of these awards were made to prominent engineers in the public utility, or allied fields. Among the recipients of the awards, late this spring, were the following: Turner Alfrey, Jr., The Dow Chemical Co.; John W. de Groot, president, Tuscarora Pipe Line Co., Ltd.; Louis A. de Rosa, director, electronic countermeasures laboratory, Federal Telecommunications Laboratories (IT&T); Frank G. Graf, manager, agency & construction sales, northeast region, Westinghouse Electric Corp.; Samuel Green vice president and chief engineer, The Brooklyn Union Gas Co.; George F. Habach, vice president, engineering, Worthington Corp.; Reinhard L. Heeren, retired, formerly with The Brooklyn Union Gas Co.; Fred Heinzelman, Jr., metallurgist, Fred Heinzelman & Sons; Edw. W. Herold, director, Electronic Research Lab, RCA; E ward E. Hill, retired, formerly ass ant to the president, Consolidated E son Company of N.Y., Inc. Grosvet Hotchkiss, co-ordinating engine Western Union Telegraph C William F. Jacob, retired, forme with General Electric Co.; E. F. Je president, Kings County Lighting C and New York & Richmond Gas C Edmund J. Kane, manager, pat licensing, Western Electric Co.; E gene R. Kulka, president, Kulka El tric Manufacturing Co.; Joseph Rintelen, Jr., chairman, department mining and metallurgy, (gas pipel metallurgy), Texas Western Colleg William L. Rodich, general manag laminated & insulating products partment, General Electric Co.; A fred C. Stevens, manager, Schenecta works, General Electric Co.; Theodo C. Towl, president, Southern P Line Co.; Aaron Wexler, associa director, Research Laboratori Westinghouse Electric Corp.; a George L. Wilcox, president, C nadian Westinghouse Co.

Atomic Trade Fair Tickets Available

Availabilty of complimentary ti ets for the 1956 Trade Fair of t Atomic Industry has been announc by the Atomic Industrial Forum, In sponsor of the annual event. The Tra Fair will be held at Navy Pier, Ch cago, Illinois, September 24-28 in co junction with the Forum's annual co ference on "Management and Tec nology for the Atomic Industry." T conference is set for the Morris Hotel, Chicago, September 25, 26 a 27.

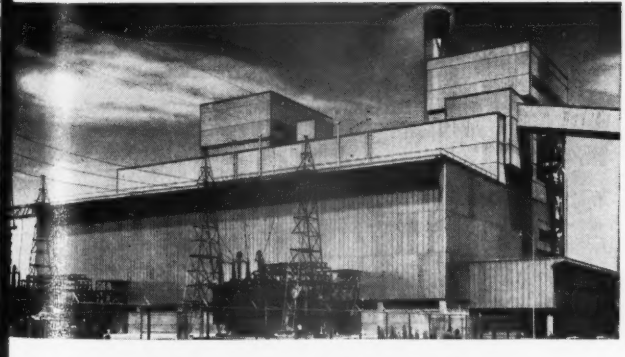
The exhibits will cover a comple range of essential products and servic related to the industrial applications atomic energy, plus materials on me ical argicultural and research us More than 100 exhibiting organiz tions will take part in the week-lo show.

The displays will be of particul interest to persons from the busine and technical management areas American and foreign industry—n only to those who are already worki in the atomic energy field but also tho who seek to adapt their operations serve this new field, or utilize energy and radiation in a wide varie of applications. Requests for tickets business letterhead may be address to the Forum at 260 Madison Aven New York 16, New York.

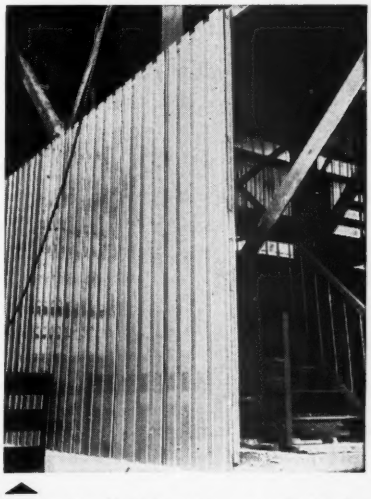


Why fine new power plants everywhere have Q-Panel Walls

Builders of new power plants in all parts of the country have specified Q-Panel walls for the following very good reasons: 1. Q-Panels are permanent, dry and noncombustible, yet may be demounted and re-erected elsewhere to keep pace with expansion programs. 2. Q-Panels are light in weight, thus reducing the cost of framing and foundations. 3. Q-Panels have high insulation value . . . superior to a 12" masonry wall. 4. Q-Panels are quickly installed because they are hung, not piled up. An acre of wall has been hung in 3 days. For more good reasons for using Q-Panel construction, use the coupon below and write for literature.



Q-Panel walls grace the new Elrama Power Plant (above) near Pittsburgh. It was designed by Duquesne Light Company's Engineering and Construction Department. The Dravo Corporation was General Contractor.



Q-Panel walls (above) go up quickly in any weather because they are dry and hung in place, not piled up.

More than 32,000 sq. ft. of Q-Panels were used to enclose the impressive Hawthorn Steam Electric Station (left) of the Kansas City, Missouri, Power and Light Company. Ebasco Services, Inc., designed and built the plant.

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How Chrysler Engineering Cuts Truck Operating Costs

by Jim Byers

When a new truck engine that promises more MPG and lower upkeep comes along, that's *news*.

But, naturally enough, fleet operators prefer not to go overboard in their praise of such new developments until they've proved them in actual operation.

That's the story of Chrysler Corporation's radically different Power-Dome V-8 combustion chamber, introduced in the 1954 Dodge C-1 series.

From the start, fleet men were agreed it looked great "on paper", but had to wait for a *factual* answer to the all-important question, "Will Power-Dome actually increase gas mileage, actually reduce maintenance costs?"

The answer to that question, after well over two years of service in fleets of all types the country over, seems to be an unqualified "Yes".

Owners of Series C-1, and the current C-3 Dodge V-8 trucks report remarkable gas savings and unusually low maintenance costs. They say they not only get more MPG (on regular fuel), but find engines maintain power and efficiency far longer than those of standard design.

In layman's language, here is how Chrysler engineers were able to give Dodge short-stroke V-8's these cost-cutting characteristics:

First, let's study the diagram below.

You'll notice, among other things, that the standard, wedge-shaped combustion chamber (Fig. 1) has corners where carbon can easily collect, whereas the Dodge Power-Dome chamber (Fig. 2) eliminates such power-stealing carbon hot spots.

Next, notice the spark-plug location. In the Power-Dome design, it is centrally located, instead of off to one side. Flame travel, therefore, is uniform to all parts of the chamber; thus the fuel mixture is burned faster, more evenly, and more completely.

Valve placement, too, is unusual. In the Dodge Chrysler-engineered power plant, intake and exhaust valves are located on opposing sides. This permits use of larger valves for easier engine breathing, elimination of fuel waste.

In addition to Power Dome, Chrysler engineers have incorporated other features in Dodge truck engines that contribute to their unusual operating economy. Among a number of such advancements not found in most competitive makes are floating oil intake, ceramic fuel filter, positive exhaust valve rotators and dual exhaust system as standard equipment.

In fact, Chrysler engineers have made "fleet economy" their theme throughout the designing of today's Dodge Job-Rated Trucks. The result is a full line of trucks any cost-conscious fleet operator would be wise to investigate before investing in a replacement or adding to his fleet.